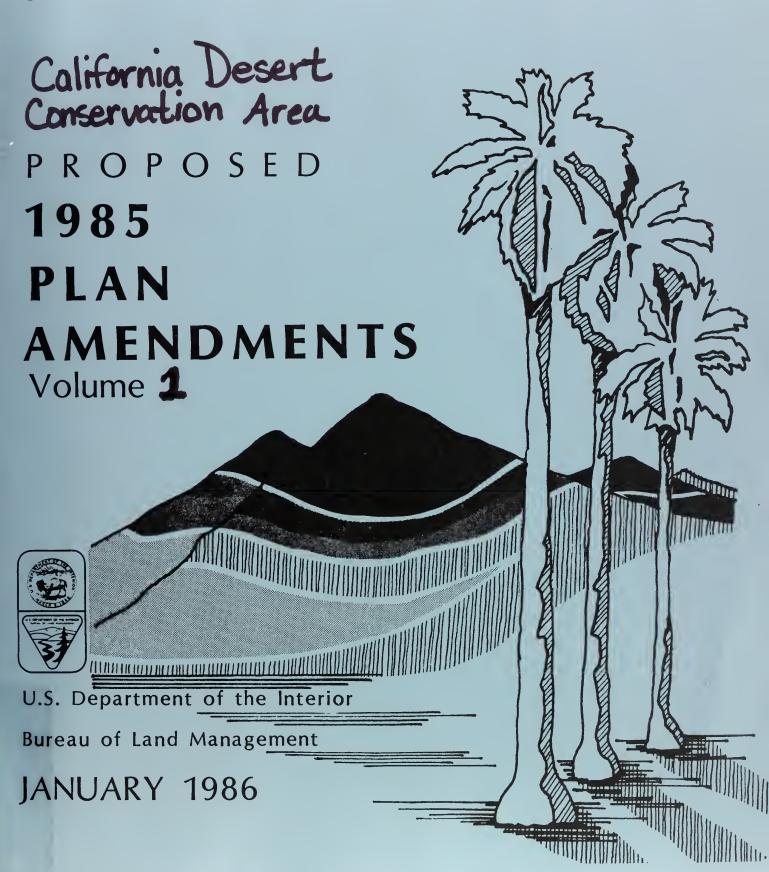


IMPACT STATEMENT





United States Department of the Interior

BUREAU OF LAND MANAGEMENT

1600 (C-064)

CALIFORNIA DESERT DISTRICT

1695 Spruce Street Riverside, California 92507

Dear Reader:

Last March (1985), we invited you and other interested parties to review the California Desert Plan as amended and submit any comments and recommendations for proposed amendments of the Plan. The response that we received from organizations and individuals as well as from our own staff resulted in the amendment proposals contained in this Draft Environment Impact Statement.

My thanks to those of you who sent in comments and suggestions - I hope that you will continue to help us manage your public lands.

The decision to accept or to reject these proposed amendments will be based on a number of factors including effect on the natural environment, input from the public, and recommendations of the California Desert District Advisory Council.

We are providing a 90-day period for public review of the Draft EIS. Please be sure to return your comments to this office no later than Send your comments to the following address:

California Desert District Bureau of Land Management ATIN: Plan Amendments 1695 Spruce Street Riverside, California 92507

Sincerely,

Gerald E. Hillier District Manager Draft Environmental Impact Statement

.cz c345

PROPOSED 1985 AMENDMENTS TO THE CALIFORNIA DESERT CONSERVATION AREA PLAN

Prepared by
Department of the Interior
Bureau of Land Management
California Desert District

BLM Library D-553A, Building 50 Denver Federal Center P. O. Box 25047 Denver, CO 80225-0047

The Bureau of Land Management is conducting its 1985 review of the California Desert Plan. The Environmental Impact Statement considers the environmental consequences of accepting or rejecting each of the 20 proposed amendments which have been accepted for consideration. Amendments fall into several categories, including desert-wide amendments, multiple-use class changes, ACEC and special area designation and boundary changes, site-specific vehicle access changes, livestock grazing adjustments, deletion of wild horse and burro areas, and a proposed BIM/Navy Cooperative Agreement in Imperial County. Under the Bureau's preferred alternative, 18 amendments would be accepted and two would be rejected. Desert-wide Class C acreage would remain at 1,655,940. Class L would change from 6,259,126 to 6,261,147, Class M would change from 3,365,184 to 3,428,954, Class I would change from 522,610 to 538,565, and unclassified land would change from 314,000 to 232,254.

STATE DIRECTOR
CALIFORNIA STATE OFFICE

For Further Information Contact:

Gerald E. Hillier, District Manager California Desert District Bureau of Land Management 1695 Spruce Street Riverside, California 92507 Princes Prince College Prio College Prio College Prio College Prio College Prio College Prio College

SUMMARY

PLAN AMENDMENTS

In accordance with the procedures set forth in Chapter 7 of the California Desert Plan and with 43 CFR 1610.5-5 (BLM planning regulations), the Bureau of Land Management, California Desert District, has initiated the fifth amendment review of the plan.

Proposals for amendments were accepted during a 30-day period from March 30 to April 30, 1985. Forty-four amendments were proposed by the public and by the BLM staff for consideration during the review. These proposed amendments were screened by BLM management and the California Desert District Advisory Council to determine which proposals should be considered at this time, which should be deferred or dropped, and which could be handled more appropriately by an adminstrative action. Twenty amendments were recommended for consideration.

Category	Number	Description
Special	1	BLM/Navy Cooperative Agreement- Imperial County
Desert-wide	2	Revise multiple use class guidelines for agriculture
	3	Revise multiple use class guidelines for communication sites
	4	Revise multiple use class guidelines for waste disposal
	5	Clarify multiple use class guidelines for transmission facilities
	6	Restate goals for plan elements
Multiple Use Class Changes	7	Change multiple use classes in Baker area, including adjustment of boundary of East Mojave National Scenic Area
	8	Change T4S, R6E, Sec. 10, within designated critical habitat of Coachella Valley Fringe-toed Lizard, from unclassified to Class L.
	9	Change all unclassified public lands within "managed" area of Coachella Valley Fringe-toed Lizard habitat to Class L. Designate all newly-acquired public lands in this area as Class L.

Category	Number	Description
	10	Change from Class L to Class M lands in the Panamint Range (in Planning Unit 25) but outside of wilderness study areas.
	11	Change from Class I to Class M the land immediately outside the south boundary of the Johnson Valley Open Area and north of the unclassified area.
	12	Change from Class L to unclassified the Johnson Valley small tract area within sections 20 and 21, T3N, R4E.
ACECs/Special Areas	13	Adjust boundaries of four ACECs as a result of inventory conducted in preparation of ACEC management plans.
		a. Clark Mountain (No. 19) b. Yuha Basin (No. 64) c. Gold Basin/Rand Intaglio (No. 67) d. Plank Road (No. 72)
	14	Establish a new ACEC at Warm Sulfur Springs in Panamint Valley area to protect marsh habitat.
	15	Reclassify all unclassified lands within the East Mojave National Scenic Area to Class L.
Vehicle Access	16	Revise vehicle access designations for Cadiz Dunes to provide more open area.
Grazing	17	Delete from the Colton Hills Grazing Allotment the portion south of Interstate 40.
Burros	18	Reduce wild horse and burro popula- tion to zero in Morongo and Coyote Canyon Herd Management Areas.
	19	Reduce the burro concentration to zero in the Cima Dome Herd Manage- ment Area.
Eastern San Diego County MFP	20	Incorporate into the Eastern San Diego County Planning Unit MFP and the EIS lands within T 16S, R 7E, Sec 16 and 20 which were acquired on 10/15/84. These lands would be designated Class L.

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Amendment No.	AMENDMENT	Soil - Air - Water	Botany	Wildlife	Horses - Burros	Cultural Resources	Native Americans	Wilderness	Visual Resources	Livestock Grazing	Recreation	Lends	Geology- Energy - Minerals
æ	CVFTL, Sec. 10, T4S / R6E												
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10.	PANAMINT RANGE		1	ı		1							×
11.	JOHNSON VALLEY OPEN AREA		×	×							×		
12.	JOHNSON VALLEY SMALL TRACT AREA											×	
13.	ACEC BOUNDARIES												
	- CLARK MTN (No.19)			×		×			Ĩ				
	- YUHA BASIN (No.64)					×							
	- GOLD BASIN / RAND INTAGLIO (No.67)					×							
	- PLANK ROAD (No.72)					×							
14.	WARM SULPHUR SPRINGS ACEC	×	×	×									
15.	EMNSA 'Unclassified' LANDS Alternative A											ĵ	
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17.	COLTON HILLS GRAZING ALLOTMENT Alternative A			×						1			

* CVFTL = Coachella Valley Fringe-Toed Lizard

Table S-2 SUMMARY OF CUMULATIVE IMPACTS

Resource	Unit of Measure	No Action	Preferred Alternative	Percent Change	New Percent of Desert
Multiple Use Class					
C L M I Unclassified	Acres Acres Acres Acres	1,655,940 6,259,126 3,365,184 522,610 314,000		+ 0.0 + 1.1 - 0.4 + 3.1 -23.5	13.7 (17.3)* 52.0 (48.8) 27.7 (27.5) 4.7 (4.1) 2.0 (2.6)
Motorized Vehicle Access					
Open Limited Closed Undesignated	Acres Acres Acres	523,000 9,301,860 1,978,000 314,000	582,360 9,292,330 1,982,950 259,460	+11.3 - 0.1 - 0.3 -17.3	4.8 76.7 16.4 2.1
ACECs and Special Areas					
Added	Number Acres	0	1 34,461		
Deleted	Number Acres	0	0 790		
Net change	Number Acres	0 0	+1 +33,671		

^{*} Percent of Area in Original Plan

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CHAPTER 1 INTRODUCTION



CHAPTER I

INTRODUCTION

In accordance with the procedures set forth in Chapter 7 of the California Desert Conservation Area (CDCA) Plan (1980) and with 43 CFR 1610.5-5, the United States Department of the Interior (USDI), Bureau of Land Management (BLM), has initiated the fifth amendment review of the plan.

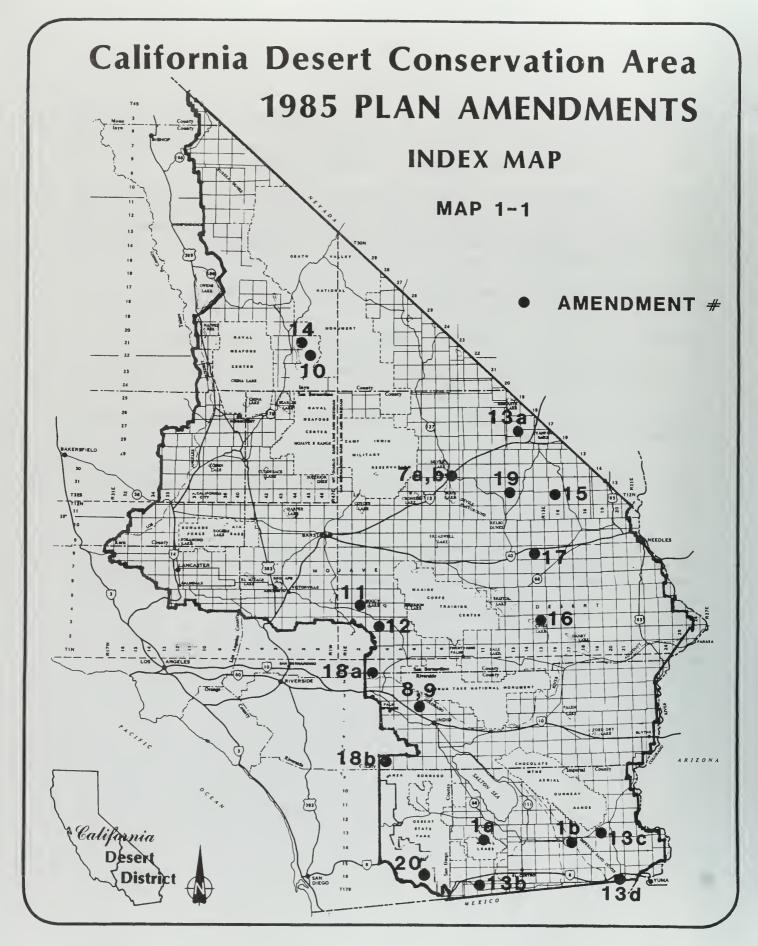
Proposals for amendments were accepted during a 30-day period from March 30 to April 30, 1985. Forty-four amendments were proposed by the public and by the BLM staff for consideration during the review. The proposed amendments were then screened by BLM management and by the California Desert District Advisory Council to determine which ones met the following criteria:

- (1) Is the proposed amendment based on new data not considered when the plan was developed?
- (2) Does the information represent a change in legal or regulatory mandate?
- (3) Is the supporting detail sufficient and the problem clearly stated so that the request can be considered?
- (4) Does the information represent a formal change in State or local government or agency plans?

Twenty proposals met the criteria and are analyzed by this Environmental Impact Statement (EIS). Twenty four proposals were rejected for consideration or will be handled by methods more appropriate than the amendment procedure, as described in Appendix C (Tables C-1 and C-2).

The final decision concerning whether or not to approve each amendment will be made 60 days following the publication of the final EIS. The decision will be based upon several factors, including the findings of this EIS and the public response received during the review periods of the draft and final EIS. That decision is expected in August, 1986.

The majority of the amendments address site-specific issues. Map 1-1 indicates their regional location; specific maps can be found in Appendix A, except for Amendment 1 maps which are found in Volume II of this document.



CHAPTER 2 ALTERNATIVES



CHAPTER II

AMENDMENTS AND ALTERNATIVES

GENERAL DESCRIPTION

Twenty proposed amendments to the California Desert Plan have been accepted for consideration. Each amendment has been considered individually for either acceptance or rejection. The rejection of an amendment represents the "no action" alternative. Additional alternatives have been proposed for several of the amendments which present modified versions of the porposal.

The amendments have been grouped into the following categories:

- 1. Special
- 2. Desert Wide
- 3. Multiple Use Class Changes
- 4. Areas of Critical Environmental Concern (ACEC) and Special Areas
- 5. Site-Specific Vehicle Access
- 6. Grazing
- 7. Wild Horses and Burros
- 8. Eastern San Diego County Planning Unit Management Framework Plan (MFP)

Table 2-1 describes each of the proposed amendments and the reasons given by the proponent for the change. Maps of all amendments except Amendment One are located in Appendix A. Maps for Amendment One are in Volume II of this document. Proponents of the amendments are listed in Appendix C (Table C-3).

	Rationale for Selection of Freferred Alternative			This alternative would satisfy the current needs of the Navy While assuring public uses.					
4	Preferred Alternative			Accept Alt.A					
TABLE 2-1 - DESCRIPTION OF AMFNOMENTS	Proponent's Reason for Submission	These changes would implement a proposed cooperative agreement between the BLM and the U.S. Navy which would satisfy the current needs for the Navy while assuring public uses. Expected revocation of the existing withdrawal by the Bureau of Reclamation (USBR) would cancel the current Navy/USBR lease, creating the need to recognize existing Navy use of these lands for bombing practice and other aircraft activities. The cooperative agreement would cover approximately 318,000 acres of Federal lands in Imperial County. It would include the following actions:	A) On the West Mesa:	1) Substitute a withdrawal by the Navy for one by the USBR on target areas (Range Safety Zone (RSZ) A, 33,700 acres).	2) Implement cooperative management on areas surrounding the targets. Land use classes within the former Navy lease area would be changed as described. Navy uses and control would be defined in rights-of-way on flight approaches (range safety zone (RSZ B) and cooperative agreement in surrounding areas (RSZ C).				
	Amendment	Change the land use classification and vehicle access of certain lands which would be covered by a cooperative agreement between the BLM and the U.S. Navy in Imperial County.	A) On the West Mesa:	Alternative A: Change the Multiple Use Class (MUC) of 68,520 acres of the lands within the Navy lease area from unclassified to MUC L and I (Map 3).	Change vehicle access on Class I lands from limited to open (Map 4).	Alternative B: Reject Amendment (no action) (Map 7)	Alternative C: Maximum Use (Maps 9, 10)	Alternative D: Minimum Use (Map 13)	
	Amendment Number	П							

ed Rationale for Selection of		Amendment accepted for reasons given in proponent's application
Preferred	Alternative	Accept
TABLE 2-1 - DESCRIPTION OF AMENDMENTS	Proponent's Reason for Submission	B) On the East Mesa: 1) Delete 11,170 acres from the California Desert Plan. This area would be withdrawn and placed under Navy jurisdiction for use as target areas (RSZ A). 2) Similar to A, above: approach areas (RSZ B and C) would be managed cooperatively under right-of-way and cooperative agreement. The MC designations made by the CDCA plan were based on the sensitivity of resources and kinds of uses for geographic areas of the desert. Currently, agricultural uses are not allowed in MCC and L. This is because agricultural use (other than livestock grazing) clearly is not in conformance with the objectives of those classes. However, intensive agricultural use is not necessarily consistent with the goals of MCM and I, either. Class I lands have been established for use as ORV open areas and for large-scale mineral extraction activities. MCC M, while allowing a variety of uses, also requires BM to "conserve desert resources." This amendment recognizes that inconsistency and prohibits intensive agriculture in those classes.
	Amendment	B) On the East Mesa: Alternate A: Change 11,170 acres from MC L and MC M to unclassified. Change the area south of Highway 78 within the proposed RSZ B area around Target area 68 from MUC M to MCC L. (Maps 5, 6) Alternative B: Reject Amendment (No action) (Map 8) Alternative C: Maximum Use (Maps 11,12) Alternative D: Minimum Use (Map 14) DESERT-WIDE Alternative A: Change the MC Guidelines of the MUC Guidelines to prohibit agricultural uses (excluding livestock grazing) in MC M and I. Permit agricultural uses to continue in unclassified lands. Alternative B: Reject amendment (no action).
Amondanan	Number	2

	Rationale for Selection of Preferred Alternative			Same as above			Same as above		
	Preferred Alternative			Accept			Accept		
TABLE 2-1 - DESCRIPTION OF AMENDMENTS	Proponent's Reason for Submission	Intensive agriculture would not be precluded from public lands, however. Agricultural development would still be allowed in the CDCA's 300,000 unclassified acres through exchange or through Desert Land Entries (DLE).		Trans-desert communication networks, unlike most single communications sites, are major actions of potential public concern warranting a 30-day public review period.			In order to reduce the Bureau's liability for enforcement or clean-up of any health or environmental problems related to a solid waste facility on public lands, lands suitable for sanitary landfills should be sold or exchanged rather than leased through the R&PP act.		
	Amendment		Multiple Use Class Guidelines-Communi- cation Sites	Alternative A: Change the MX Guidelines on communication sites. For long distance line-of-sight systems of three or more sites, require a 30-day public comment period on environmental assessments.	Alternative B: Reject amendment (no action)	Multiple Use Class Guidelines - Waste Disposal	Alternative A: Change MUC Guidelines for Waste Disposal in MUC M and I to read: "Public lands managed by BLM may not be used for waste disposal (either hazardous or non-hazardous). Where locations suitable for disposal are found on BLM-managed lands, consideration will be given to transfer of such sites through sale or exchange to other ownership."	Alternative B: Reject amendment (no action)	
	Amendment		т			4			

	Rationale for Selection of Preferred Alternative	Same as above		Same as above	
	Preferred Alternative	Accept		Accept	
TABLE 2-1 - DESCRIPTION OF AMFNOMENTS	Proponent's Reason for Submission	The guidelines presently state that "transdesert communication facilities may be allowed only within designated corridors." The wording is confusing, because the communications facilities referred to in the Energy Production and Utility Corridors Element (p. 115) are "coaxial cables for interstate communications," not line-of-sight microwave systems, which frequently cannot be located within utility corridors.		This Plan modification is in response to the findings and recommendations in the recently completed report entitled "California Desert Conservation Area Progress, 1980-1984." The goals outlined in Chapter 3 of the Desert Plan were found, in many instances, to be too vague to measure the effectiveness of the District's management of the Desert. The report recommended that the goal statements be rewritten to reduce redundancy and vagueness and that the goals be achievable and measurable. The intent would be to improve clarity and consistency without changing the intent or purpose of the resource element.	
	. Amendment	Correct Multiple Use Class Guidelines On Transmission Facilities Alternative A: Correct MUC Guidelines for transmissions facilities in MUC L, M, and I to state: "New gas, electric, and water transmission facilities and cables for interstate communications may be allowed only within designated corridors".	Alternative B: Reject amendment (no action) Restatement of Goals for Plan Elements	la di	Alternative B: Reject amendment (no action)
	Amendment Number	ιΛ	o		

	Rationale for Selection of Freferred Alternative			This alternative would encourage development of all privately—owned land in the Baker CSD south of I-15 and delay disposal of Federal land in this area until all private lands had been developed or until a real need for	the public lands was demonstrated. It would place the decision-making responsibility for development or non-development on the County of San Bernardino rather than on the Burgan	In setting the boundary of the EANSA, a mapping error was made; the Bureau never intended that it would pass directly through Bhys or that this designation	would conflict with development of the community of Baker.			
	Preferred Alternative			Accept Alt. E						
TABLE 2-1 - DESCRIPTION OF AMENDMENTS	Proponent's Reason for Submission			When multiple use classes were assigned during the preparation of the Desert Plan, not all of the Baker CSD was placed in unclassified status. The boundary of the EANSA was drawn along I-15, rather than along the boundary of the CSD. As a result, the CSD contains MCC M lands which should	be changed to unclassified to reflect the Bureau's intent to dispose of these lands. In addition, the EMNSA boundary encompasses a portion of the Baker CSD which should be available for future community development.	Retention of public lands within the EMNSA is necessary to the integrity of the area. The boundary of the EMNSA should not be changed.	Classification of these lands as MUC M would be in conformance with the surrounding lands, but a commitment to retain the lands in public ownership would be necessary, since the Desert Plan allows the sale of MUC M lands.		This would remove the threat of interference by the Bureau with the development of private lands in the amendment area (south of I-15), while assuring that public lands would be retained in Federal ownership.	
4	Amendment	MULTIPLE USE-CLASS CHANGES	Change Multiple Use Classes in Baker Area and Adjust Boundary of EMNSA	Alternative A: Adjust boundary of unclassified area at Baker to include entire Community Service District by changing 431 acres of MUC M land to unclassified. Adjust boundary of the East Mojave National Scenic Area (EMNSA) to coincide	with southern and eastern boundary of amendment area as shown on map in Appendix A.	Alternative B: Change the unclass- ified and MUC M land within the amendment area and south of I-15 to MUC L and leave EWNSA boundary at I-15.	Alternative C: Change the unclassified land within the amendment area and south of I-15 to MUC M with the intention of not disposing of it. Leave the EMNSA boundary at I-15.	Alternative D: No action	Alternative E: Change the unclassified land within the amendment area and south of I-15 to MVC M, and adjust the boundary of the EMNSA to coincide with the boundary of the amendment area.	
	Amendment Number		7							

Rationale for Selection of Preferred Alternative	Amendment accepted for reasons given in proponent's application.	Same as above.	Mineral data was carefully assessed during Desert Plan preparation. Designation as MUC L was, and still is, appropriate, due to the presence of sensitive natural resources. Some of the proponent's interests lie within Wilderness Study Areas. A change in multiple—use class	change in multiple—use class would be premature and ineffective, since the Interim Management Policy will be in effect until Congress acts.
Preferred Alternative	Accept	Accept	Reject	
TABLE 2-1 - DESCRIPTION OF AMENDMENTS Proponent's Reason for Submission	This would impose land use guidelines which are more consistent with BIM's commitment to longterm management of the land for the benefit of the CVFIL. MUC L would also be consistent with the current land use of adjacent areas to the east which are presently MUC L.	This would reflect BLM's commitment to upholding the provisions of the Habitat Conservation Plan and would represent more appropriate land use guidelines for the same reasons given in the preceding amendment proposal.	" During and after the inventory phase, the mineral study of the Panamints was rather neglected compared to other subjects within the area. There is new data available which should be considered. The delay in processing Plans of Operations which are required for MUC L causes loss of valuable time for a mine operator and a financial burden."	
Amendment	Coachella Valley Fringe-Toed Lizard Habitat Alternative A: Reclassify Sec. 10, T 4S, R 6E, which is within the designated critical habitat for the endangered Coachella Valley fringe- toed lizard (CVFTL), from unclassi- fied to MUC L. Alternative B: Reject amendment [no action]	Coachella Valley Fringe-toed Lizard Habitat Alternative A: Reclassify public lands, including newly-acquired lands, within the area of the Coachella Valley Fringe-toed Lizard Conservation Plan from unclassified to MUC L.	Reclassify Panamint Range Alternative A: Reclassify that portion of the Panamint Range within Planning Unit 25 and not included in a Wilderness Study Area from MUC L to MUC M.	
Amendment Number	ω	σ	10	

	Rationale for Selection of Preferred Alternative		Amendment accepted for reasons given in proponents application.	Same as above			
	Preferred Alternative		Accept	Accept			
TABLE 2-1 - DESCRIPTION OF AMFNOMENTS	Proponent's Reason for Submission		The southern boundary of the Johnson Valley Open Area has been adjusted by the BLM, through plan clarification, to be consistent with topographic features and to recognize existing private land and residential patterns. There is now a zone of Class I lands outside the Open Area which is closed to ORV use. This is inconsistent with the Desert Plan which has MUC I lands either as open or as mineral extraction areas. A more proper designation would be MUC M rather than MUC I or unclassified, which implies disposal.	The area is flat and interspersed with private land (small tract parcels). The change would	acknowledge the existing private land and the intention to sell the remaining portions of public land.		
	Amendment	Johnson Valley Open Area	Alternative A: Change the strip of land immediately outside the south boundary of Johnson Valley Open Area and north of the unclassified area from MUC I to MUC M. Alternative B: Reject Amendment (no action)	Small Tract Area South of Johnson Valley Alternative A: Adjust the MUC L boundary at the south edge of the	Johnson Valley small tract area so that portions of Sections 20 and 21, T 3N, R 4E are changed from MUC L to unclassified. Alternative B: Reject Amendment (no action)	AREAS OF CRITICAL ENVIRONMENTAL CONCERN AND SPECIAL AREAS Refine original boundaries of four ACECs. These changes are the result of extensive inventory conducted before or during preparation of activity	plans for each ACEC.
	Amendment Number	11		12		13	

	Rationale for Selection of Preferred Alternative	Same as above		Same as above		Same as above			
	Preferred Alternative	Accept		Accept		Accept			
TABLE 2-1 - DESCRIPTION OF AMENDMENTS	Proponent's Reason for Submission	The final Clark Mountain Management Plan recommended the above boundary adjustment to provide a more manageable boundary and to incorporate areas with significant resources. The draft plan had also recommended the inclusion of an additional 6,740 acres to the northeast that would protect sensitive plant habitat. It has since been discovered that these plants are more common than originally known, and that they do	not tequite ligitagellent as an Actor.	The original ACEC was nominated to protect significant wildlife and cultural resource values. Monitoring of the region revealed that important habitat for the flat-tailed horned lizard was excluded from the original boundary along with several cultural resource areas. These areas should be added.		The original boundary included only a small portion of the geoglyphs present in the area. Recent cultural resources Class III inventory has revealed that the ground figures actually	lie south and west of the designated area. This amendment will rectify this mapping error.		
	Amendment	Clark Mountain ACEC (No. 19) Alternative A: Adjust boundary to include approximately 3,000 acres of sensitive plant habitat along northern edge and 1,270 acres of archaeological sites at the Ivanpah townsite. Delete 600 acres of marginal wildlife habitat along the south and west boundaries.	Alternative B: Reject Amendment (no action) Yuha Basin ACEC (No. 64)	Alternative A: Revise the boundary to include the entire area covered by the Yuha Desert Management Plan.	Alternative B: Reject Amendment (no action)	Gold Basin/Rand Intaglio ACEC (No. 67) Alternative A: Relocate boundary to correspond with the distribution of resources.		Alternative B: Reject Amendment (no action)	
	Amendment Number	13a	13b			13c			

	Rationale for Selection of Preferred Alternative		Same as above			Same as above			This alternative would place about two-thirds of the unclassified lands in the EMNSA in the more protective MUC L	designation, indicating the Bureau's intent to not dispose of the land. The smaller parcels of unclassified land would remain unclassified and	would be available as a fairly large base of disposable land.		
	Preferred Alternative		Accept			Accept			Accept Alt. B				
TABLE 2-1 - DESCRIPTION OF AMENDMENTS	Proponent's Reason for Submission		The existing ACEC contains only the small portion of the original route adjacent to Gray's Well. Remnants of the Plank Road are visible intermittently along the route. ACEC stature	should be ascribed to the entire length to ensure management consistency.		Warm Sulfur Springs is a desert marsh in Panamint Valley having considerable importance to wildlife. The marsh provides habitat for	waterfowl, wading birds, amphibians, and other species. The area requires site-specific management prescriptions. ACEC designation will accomplish this and preclude adverse impacts.		" Retention of public lands within the EMNSA is necessary to the integrity of the area. BLM should do the planning for the EMNSA, not the County of San Bernardino Planning Dept. "	Many of the small parcels which are excluded contain 160 acres or less and are surrounded on three or four sides by private land. These lands should remain unclassified and be avail-	able for sale or exchange for private lands in more significant regions.		
	Amendment	Plank Road ACEC (No. 72)	Alternative A: Adjust boundary to correspond to a 200 foot-wide strip along the entire length of the existing Plank Road route.	Alternative B: Reject amendment (no action)	Warm Sulfur Springs	Alternative A: Establish an ACEC at Warm Sulfur Springs.	Alternative B: Reject Amendment (no action)	Change the unclassified lands in the East Mojave National Scenic Area to Class L (except in the Baker vicinity, which is considered in Amendment 7)	Alternative A: Change all unclassified land to Class L.	Alternative B: Reclassify only the larger contiguous parcels of unclassified lands to Class L.	Alternative C: Reject amendment (no action)		
	Amendment Number	13d			14			15					

	Rationale for Selection of Freferred Alternative	This alter the best vecreation the higher portion of continued, of this we and suffic terrain to experience and ORV us between or would be and more the existing the policy south of such as the such as the such as the policy such as the such as the such as the such as the policy such as the suc	and the Chemehuevi Mountains; they were unaware of the strip of land south of I-40 within the Colton Hills Allotment. Their intent was not to eliminate that long-time use. This amendment would clarify that decision.
•	Preferred Alternative	Accept Alt. A Alt. A Reject	
TABLE 2-1 - DESCRIPTION OF AMFNOMENTS	Proponent's Reason for Submission	Although the lower Cadiz Valley was once designated open under the 1973 ICMP program, it was not considered for cross country ORV use by the Desert Plan. Continued population growth in the Yucca Valley/Joshua Tree corridor, recent changes in available ORV areas, a significant increase in ORV numbers and use, and the demonstrated unpopularity of the nearby Rice Dunes are factors that were either unknown or not available for consideration during preparation of the Desert Plan. "According to the Desert Plan, cattle should not be allowed in the bighorn range south of I-40. The portion of the allotment south of I-40 is very small and provides for only limited cattle use. Recent evidence indicates that diseases commonly associated	with livestock are important factors in the the decline of bighorn sheep populations."
	Amendment	Mevise the ORV designations Revise the ORV designations for Cadiz Dunes Alternative A: Designate 5,760 acres closed and 32,000 acres open; Change MC designation from Class L to Class I in open area. Alternative B: Designate 37,760 acres open. Change MC designation from Class L to Class I in open area. Alternative C: Designate 37,760 acresclosed; entire area would remain MUC L. Alternative D: No action; 9,280 acres would continue to be closed, with the remainder limited to "existing routes of travel." LIVESTOCK GRAZING Colton Hills Grazing Allotment Alternative A: Delete the area south of I-40.	South of I-40 and west of the Essex Road. Alternative C: Reject amendment (no action)
	Amendment Number		

a contract of the contract of		Use of the Clipper Mountain foothills for grazing has been mitigated by providing additional water sources which serve both livestock and desert bighorn.	Amendment accepted for reasons given in proponents' application.	Same as above	The number of burros in this area has increased to the point where overuse of forage is occurring. Removal of burros would relieve this situation and result in more forage for wildlife and less competition at water holes. The Scenic Area would benefit from a reduction in grazing and from increased plant growth.
Drofor	Alternative		Accept	Accept	Accept
TABLE 2-1 - DESCRIPTION OF AMENDMENTS	Proponent's Reason for Submission		Retention and management of burros on public land in the Morongo area is infeasible due to the very small herd numbers and the high percentage (35%) of intermingled lands.	The Coyote Canyon herd of about 20 horses is scheduled for removal by the Santa Rose Habitat Management Plan for protection of bighorn sheep.	" Burros have migrated to this area (White Rock pasture area and Thomas pasture area of Kessler Springs grazing allotment) since the implementation of the Desert Plan. Prior to this time, there were no burros in either of these two sections of the allotment, and there should not be any there now. "
	Amendment	WILD HORSE AND BURROS	Herd Management Areas Alternative A: Reduce wild horse and burro populations to zero in the Morongo and Coyote Canyon HMAs.	Alternative B: Reject amendment (no action) Cima Dome Herd Management Area	Alternative A: Reduce burro population to zero in the Cima Dome HWA Alternative B: Reject amendment (no action)
	Amendment		18	19	

	Rationale for Selection of Preferred Alternative	Amendment accepted for reasons given in proponents application.		
	Preferred Alternative	Accept		
TABLE 2-1 - DESCRIPTION OF AMENDMENTS	Proponent's Reason for Submission	The newly-acquired lands were not studied in preparation of the MFP for the Eastern San Diego County Planning Unit. In order to be properly managed, they need to be included in the land use plan for that area. The newly obtained acreage is similar to the surrounding public land in appearance and use. The area consists of rolling topography covered with chaparral and enriched desert shrubs. Histori-	cally, the primary uses have been for grazing and hunting. Because this land cannot be separated from the surrounding region, it should receive the same management. Since the parcels are small and surrounded by MUC L lands, they would also be designated MUC L.	
	Anendment	Modify the Eastern San Diego County Planning Unit MFP Alternative A: Include all newly acquired lands in T 165, R 7E, Sec. 16 & 20, totalling 595 acres. This land was acquired in case C-15726 on 10/15/84 from the Trust for Public Lands. Designate these lands Class L.	Alternative B: Reject amendment (no action)	
	Amendment Number	20		

SUPPLEMENTARY INFORMATION

AMENDMENT ONE

NAVY COOPERATIVE AGREEMENT

Introduction

The following description provides specific information on the alternatives. Before reviewing this information, the reader should review the proposed cooperative agreement (Appendix E), especially Section III, Definitions, and Section IV, Current Operational Requirements. It is particularly important to become familiar with the location of Range Safety Zones (RSZ), which are indicated on Maps 1 & 2.

The cooperative agreement (and this plan amendment) was prompted by the filing of an imperfect withdrawal application by the United States Department of the Navy (USN) at the BLM California State Office on August 24, 1984. The Navy stated its intent to implement an Air Installations Compatible Use Zone (AICUZ) Program by withdrawing approximately 318,000 acres of land in Imperial County, California. The AICUZ program recommends strategies for minimizing the adverse impacts of aircraft noise and accident potential in the vicinities of Naval air stations. It also addresses non-aviation activities through land use compatibility studies which have been prepared for a variety of installations whose functions are particularly sensitive to peripheral or environmental encroachment. The East and West Mesa study area boundaries correspond to the boundaries of the withdrawal as filed.

The proposal for a full withdrawal of approximately 318,000 acres raised a number of concerns regarding the Navy's application. Negotiations were held involving the BLM, the Navy, and various local interest groups. The purpose of these talks was to see if alternatives to full withdrawal could be developed which would both meet the needs of the Navy and require significantly less than the full 318,000 acres. The results of those discussions was the cooperative agreement, which is presented in this document as the BLM/Navy Proposed Action (Alternative A). In addition, three other alternatives are addressed which meet, to differing degrees, the needs of the BLM, Navy and local groups. These are Alternative B, No action (including the possible future total withdrawal of the entire study area), Alternative C, Maximum Use, and Alternative D, Minimum Use.

This EIS is the National Environmental Policy Act (NEPA) compliance document for all actions necessary to implement the proposed cooperative agreement. These actions include not only the multiple-use class amendment (which will be necessary if the Desert Plan is to reflect the provisions of the agreement), but also several other actions related to the agreement. These other actions include the following:

- processing of a withdrawal application by the BLM for the U.S. Navy under the auspices of the Engle Act (PL 85-337) for those areas noted as Range Safety Zone A and subsequent issuance of a Public Land Order upon favorable action on the application;

- processing of a right-of-way application by BLM for the US Navy under the auspices of the Federal Land Policy and Management Act (FLPMA), and subsequent issuance of a right-of-way upon favorable action on the application for those areas noted as Range Safety Zone B;
- motorized vehicle access designations;
- route of travel designations in Class L areas.

In the following descriptions please note that the sections have been divided into "west" and "east". Table 2-2 summarizes the changes in multiple-use classes and motorized vehicle access in the four alternatives.

Alternative A - Proposed Action (West Side)

Multiple Use Class (MUC) Changes (Map 3)

Unclassified Navy Lease Lands to MUC I (27,780 acres): The Navy lease area south of the crest of Superstition Mountain and east of Target 103 and the Target 103 RSZ B lands would be designated MUC I. All lands proposed for MUC I are within RSZ C, with the exception of the southern flank of Superstition Mountain, which is RSZ B. In addition, the Navy would agree to manage several small parcels of RSZ A land south of the crest of Superstition Mountain for intensive recreation, even though the parcels would be withdrawn to the Navy.

This would incorporate into MUC I the major concentrations of existing recreational use and the majority of lands most frequently used for competitive events. Lands around the Bullhead and Camelot drop zones between the Ancient Dry Lake and Plaster City Open Area would remain unclassified and would be withdrawn to the Navy. Two 40 acre temporary closures would be established to protect sensitive cultural resource values. These closures would be lifted once archaeological values were mitigated (Map 3).

Unclassified Navy Lease Land to MUC L (40,740 acres): The remainder of the Navy Lease lands would be designated MUC L, with the exception of lands in RSZ A near target areas, which would remain unclassified and be withdrawn to the Navy. MUC L areas would include all lands (except RSZ A) north of the crest of Superstition Mountain and lands between the Carrizo Impact Area and the east boundary of the Target 103 RSZ B.

MUC M to MUC L (3,920 acres): Public lands adjacent to the northeast boundary of the Navy Lease area and which fall within the Target 101 RSZ B would be reclassified from MUC M to MUC L.

MUC M to MUC I (1,120 acres): Public lands east of the Ancient Dry Lake along Wheeler Road would be reclassified from MUC M to MUC I. These would include lands used for competitive events and the Imperial Valley Rifle and Pistol Association's Recreation and Public Purposes Act (R&PP) lease for a shooting range.

BIM/Navy Cooperative Agreement: Summary of Changes in Multiple Use Class and Vehicle Access Designations

TABLE 2-2

Action) Use) Use) MULTIPLE USE CLASS CHANGES (Acres) - WEST SIDE Unclassified to I 27,780 0 48,260 8,000 Unclassified to L 40,740 0 20,260 60,520 M to L 3,920 0 3,920 4,710 M to I 1,120 0 1,120 330 I to L 500 0 0 500 I to Unclassified 1,280 0 1,280 1,280 M to Unclassified 1,540 0 1,540 VEHICLE ACCESS CHANGES (Acres) - WEST SIDE
Unclassified to I 27,780 0 48,260 8,000 Unclassified to L 40,740 0 20,260 60,520 M to L 3,920 0 3,920 4,710 M to I 1,120 0 1,120 330 I to L 500 0 0 500 I to Unclassified 1,280 0 1,280 1,280 M to Unclassified 1,540 0 1,540 1,540
Unclassified to L 40,740 0 20,260 60,520 M to L 3,920 0 3,920 4,710 M to I 1,120 0 1,120 330 I to L 500 0 0 500 I to Unclassified 1,280 0 1,280 1,280 M to Unclassified 1,540 0 1,540 1,540
M to L 3,920 0 3,920 4,710 M to I 1,120 0 1,120 330 I to L 500 0 0 500 I to Unclassified 1,280 0 1,280 1,280 M to Unclassified 1,540 0 1,540 1,540
M to I 1,120 0 1,120 330 I to L 500 0 0 500 I to Unclassified 1,280 0 1,280 1,280 M to Unclassified 1,540 0 1,540 1,540
I to L 500 0 0 500 I to Unclassified 1,280 0 1,280 1,280 M to Unclassified 1,540 0 1,540 1,540
I to Unclassified 1,280 0 1,280 1,280 M to Unclassified 1,540 0 1,540 1,540
M to Unclassified 1,540 0 1,540 1,540
VEHICLE ACCESS CHANGES (Acres) - WEST SIDE
VEHICLE ACCESS CHANGES (Acres) - WEST SIDE
VEHICLE ACCESS CHANGES (ACTES) - WEST SIDE
Undesignated to Limited 40,740 0 20,260 60,520
Open to Limited 500 0 0 500
Undesignated to Open 27,780 0 48,260 8,000
Open to Undesignated 1,280 0 1,280 1,280
Limited to Open 1,120 0 1,120 330
Limited to Undesignated 1,540 0 1,540 1,540
Withdrawn, managed as Open 240 0 1,320 70
MULTIPLE USE CLASS CHANGES (Acres) - EAST SIDE
L to Unclassified 5,370 0 5,370 5,370
M to Unclassified 5,800 0 5,800 5,640
M to L 10,230 0 0 10,390
VEHICLE ACCESS CHANGES (Acres) - EAST SIDE
Limited to Undesignated 9,400 0 9,400 9,240
Closed to Undesignated 1,760 0 1,760 1,760
Limited to Closed 10,230 0 0 10,360

 $\underline{\text{MUC I to MUC L (500 acres)}}$: For purposes of manageability, the north boundary of the Plaster City Open Area on the west side of Target 103 would be moved south from a section line to an existing road. Lands between the road and section line would be reclassified from MUC I to MUC L.

MUC I to Unclassified (1,280 acres): Public lands south and west of Target 103 which fall within RSZ A would be reclassified from MUC I to unclassified and withdrawn to the Navy.

MUC M to Unclassified (1,540 acres): Public lands east of Target 101 which fall within RSZ A would be reclassified from MUC M to unclassified and withdrawn to the Navy.

Off-road Vehicle and Route of Travel Proposed Actions

Limited Areas: 40,740 acres of unclassified Navy Lease lands and 500 acres of Plaster City Open Area lands would be redesignated as limited to approved routes (see Map 4). These lands are located between the Carrizo Impact Area and the east boundary of the Target 103 RSZ B, and north of the crest of Superstition Mountain. Competitive events and general public access would be permitted on all approved routes within these limited areas. BLM would obtain Navy concurrence before authorizing specific competitive events within RSZ B.

Specific routes proposed for approval and closure are indicated on Map 4. These routes were inventoried and evaluated using criteria established for the designation of areas and trails as specified in Chapter 43 of the Code of Federal Regulations, subpart 8342.1. This regulation states the following criteria:

- a) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitablity.
- b) Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protecting endangered or threatened species and their habitats.
- c) Areas and trails shall be located to minimize conflicts between ORV use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such use with existing conditions in populated areas, taking into account noise and other factors.
- d) Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect the natural, aesthetic, scenic, or other values for which such areas are established.

Route-specific rationale for proposed closures are indicated in Table 2-3. Routes proposed for approval were evaluated against the 8342.1 criteria and found to be consistent with those criteria. Use of the approved routes is judged to be consistent with the management objectives of the area crossed by the route.

Open Area: 27,780 acres of unclassified Navy Lease lands and 1,120 acres of BIM lands along Wheeler Road which are currently limited to approved routes would be redesignated as an open area (Map 4). The open area would include lands south of the crest of Superstition Mountain and east of the Target 103 RSZ B, with the exception of the unclassified lands around the Bullhead and Camelot drop zones (immediately south of the Ancient Dry Lake). In addition, the Navy would agree to manage several small parcels of RSZ A lands south of the crest of Superstition Mountain as open area, even though the parcels would be withdrawn to the Navy. A mile-wide corridor of open area would separate Target 103 and the parachute drop zone area, although the corridor is partially private property. BLM would obtain Navy concurrence before approving competitive events or other recreation management plans or actions in those portions of the open area falling within RSZ B. An evaluation of the proposed open area is presented in Appendix I.

Two temporary 40-acre closures are proposed to protect sensitive cultural resources under authority from 43 CFR 8364.1. Both closures would be rescinded once archaeological values within these closures had been mitigated. One closure lies south of the Ancient Dry Lake, and the other is located northeast of the junction of Routes SF-272 and SF-404 south of Superstition Mountain.

Unclassified Lands: 1,280 acres of the Plaster City Open Area immediately south of Target 103 and 1,540 acres of limited land east of Target 101 would be redesignated as unclassified and withdrawn to the Navy, in order to protect public safety within RSZ A. The remaining RSZ A lands are all located on unclassified Navy lease lands and would remain so.

In accordance with the cooperative agreement, the unclassified lands (RSZ A) would be available for competitive events, as approved on a case-by-case basis by the Navy. A minimum of 12 events per year would be permitted either totally or partially within the unclassified lands. Recreational access into the unclassified lands for purposes other than permitted competitive events would be prohibited unless special permission were obtained from the Navy. Public access via Imler and Huff Roads would be eliminated through the unclassified lands around Target 101. The Navy would coordinate with BLM and the County of Imperial to provide alternate access along the approximate alignments shown on Map 4.

Public Lands Outside the Navy Lease Area: Recreation management in the RSZ B and C areas north and south of the Navy Lease lands would remain unchanged. The San Felipe Vehicle Corridor would be established in accordance with an approved State Off-Highway Vehicle (OHV) Project, and the Ocotillo Wells State Vehicular Recreation Area expansion proposal would be free to proceed in accordance with State plans. BLM would obtain Navy concurrence before approving competitive events or other recreation management plans or actions in RSZ B.

TABLE 2-3
Rationale for Route Closure in Alternative A

Route Number 8	3342.1 Criteria	Rationale
Y183, Y1330	(c)	These are former competitive event courses which cross private property. Alternate event courses and access routes which avoid private property are available nearby.
SF-395, SF-394	(c)	SF-394 crosses the Target 103 run-in line and illegally crosses the Gypsum Railroad at a location with no formal crossing. SF-395 is a very faint route which serves primarily as a connector to SF-394. These routes are proposed for closure to eliminate safety problems associated with crossing the target run-in line and the railroad.
SF-366	(c)	This route is the Target 103 run-in line. Low-flying aircraft carrying various forms of armed ordnance frequently fly directly along this bull-dozed line. Danger from prematurely dropped ordnance or falling aircraft parts is significant. Closure is proposed to protect public safety.
SF-351 (south of SF-399)	(c)	This is the Gypsum Railroad maintenance road. It is proposed for closure at the first intersection north of Target 103, to protect public safety. Alternate access around the target is available to the east via SF-399.
SF-377	(c)	This is the run-in line for Target 101. It is proposed for closure to protect public safety.

The Recreation and Public Purposes lease to the Imperial Valley Rifle and Pistol Association for a shooting range near Wheeler Road would be implemented according to the provisions of the lease, which provides for a safety evaluation to determine the site's suitability for high-powered rifles.

<u>Wilderness</u>: The status and suitability recommendation of Fish Creek Mountains WSA (CDCA-372) would not be amended or modified. Interim management would follow provisions of the Interim Management Policy (IMP). Navy concurrence would be obtained before approval of any interim management actions which require concurrence according to Section VB, of the proposed cooperative agreement.

The Navy would be granted a right-of-way within that portion of WSA 372 which falls within RSZ B. The right-of-way would provide for continuation of existing overflights and for limitations on the height of structures and type of facilities allowed in the RSZ. The right-of-way would not authorize surface disturbing activities within the WSA. In the event the WSA is designated as wilderness, the Wilderness Management Policy (WMP) would apply. The Navy would be consulted in the development of the wilderness management plan for the area. The RSZ B right-of-way would be subject to review at the time of preparation of the plan.

Alternative A - Proposed Action (East Side)

Multiple Use Class Changes (Map 5)

MUC L to Unclassified (5,370 acres): Public Lands in RSZ A around Target 95 would be reclassified from MUC L to unclassified, and withdrawn to the Navy.

MUC M to Unclassified (5,800 acres): Public lands in RSZ A around Target 68 would be reclassified from MUC M to unclassified and withdrawn to the Navy.

MUC M to MUC L (10,230 acres): Public lands within RSZ B around Target 68 would be reclassified from MUC M to MUC L. The MUC L boundary on the west and southwest sides of Target 68 would extend a short distance outside RSZ B in order to incorporate existing roads or vehicle routes as readily identifiable boundaries, and to include cultural resources sites within the Lake Cahuilla ACEC No. 66.

Off-road Vehicle and Route of Travel Proposed Actions

<u>Unclassified Lands</u>: 9,400 acres of land around targets 68 and 95 currently designated as limited to approved routes and 1,760 acres of land around Target 68 currently designated as a closed area would be redesignated as unclassified and withdrawn to the Navy, in order to protect public safety in RSZ A (Map 5). Public access into the unclassified lands would be prohibited.

Closed Areas: 10,230 acres south of State Highway 78 and west of the old Coachella Canal which are being reclassified to MUC L would be redesignated from limited to approved routes to closed. This area closure is proposed based on 43 CFR 8342.1 criteria (a), (b), and (c) (see Alternative A - West Side). Vehicle routes within the proposed closure are being used increasingly for camping on high-use weekends, especially near the old Coachella Canal. The campsites along these routes serve as bases from which playriders disperse into surrounding areas, often not utilizing existing routes of travel. Playriders are increasingly wandering into Target 68. Cross-country vehicle activity off existing routes is also impacting flat-tailed horned lizard habitat and archaeological sites along the eastern shoreline of ancient Lake Cahuilla, within Lake Cahuilla ACEC No. 66. The area would be closed in order to protect public health and safety, wildlife habitat, and archaeological resources.

Other Designations: Off-road vehicle designations and route of travel decisions would be unchanged in the remainder of East Mesa and Imperial Sand Dunes. General recreational uses of the Imperial Sand Dunes, including vehicle access and existing campgrounds, are compatible with RSZ C, and would require no change in operations. Organized and competitive events would not require close coordination with the Navy.

<u>Wilderness</u>: The status and suitability recommendation of North Algodones <u>Dunes (CDCA-360)</u> would not be amended or modified by the proposed amendment. Interim management would follow the provisions of the IMP. Navy concurrence would be obtained before approval of any interim management actions which required concurrence according to Section V B of the proposed cooperative agreement. In the event the WSA is designated as wilderness, the WMP would apply. The Navy would be consulted in the development of a wilderness management plan for the area.

Alternative B - No Action (West Side and East Side)

Under Alternative B, no cooperative agreement would be developed and no right-of-way issued to the Navy. The Navy lease area would remain unclassified and, with the exception of competitive events and minerals management, would not be managed by BLM. Initially, Alternative B would represent a continuation of the existing situation. In the longer term, this alternative might include reapplication by the Navy for full withdrawal of approximately 318,000 acres, or all lands within RSZ A, RSZ B and RSZ C (Maps 7 and 8).

Alternative C - Maximum Use (West Side)

Introduction

In Alternative C, emphasis would be placed on preserving existing recreational opportunities and minimizing the cost and level of management. The objective would be to come as close as possible to maintaining the existing situation, to give the Navy Lease lands (excluding RSZ A) the status of public lands managed according to the Desert Plan, and to meet the operational needs of the Navy.

Alternative C is identical to Alternative A with the exception of the specific items outlined below. The major difference between the two alternatives with regard to West Mesa is that under Alternative C, more intensive recreational use would be allowed in RSZ B areas south of Superstition Mountain, and the north boundary of the intensive use area would be extended to include the north slope of Superstition Mountain.

Multiple Use Class Changes (Map 9)

Unclassified Navy Lease Lands to MUC I (48,260 acres): With the exception of RSZ A lands, most of the Navy Lease area south and west of the Target 101 RSZ A would be proposed for MUC I. In the Superstition Mountain area, the north boundary of MUC I would be located along the powerline road (which corresponds to BLM route SF-391), extending northeast of the powerline to encompass a small area of dunes in Section 24, T14S, R11E, and Section 19, T14S, R12E, S.B.M.

Designation of the powerline as the north boundary of the intensive recreation area would incorporate all of Superstition Mountain into the area, rather than the south slope only as in Alternative A. The powerline represents a readily identifiable surface feature, as does the edge of the small dune system, and would facilitate posting and enforcement of the intensive use boundary. This boundary would also encompass all features in the Superstition Mountain area which are of interest to ORV recreationists.

The RSZ B zones west of Target 101 and northwest of Target 103 would be proposed for MUC I rather than MUC L in order to reduce the cost of signing, monitoring, and enforcement. Use in these areas is low and is usually associated with competitive events. Through the permitting process, competitive events would be directed away from RSZ B zones during periods of Navy operations. The San Felipe Corridor would be posted through the RSZ B.

Signing and enforcement would be concentrated on the RSZ A boundaries. Through the cooperative agreement (Part VI B 4 i(3)) provision is made for restriction of public access into RSZ B during special Navy operations. This provision will remain in effect under Alternative C. The Target 103 run-in line, inventoried route SF-366, would be posted with hazard warnings and closed to public use except for right-angle crossings.

Unclassified Navy Lease lands to MUC L (20,260 acres): The remainder of the Navy lease lands, with the exception of RSZ A, would be assigned to MUC L. This includes two small areas on the southwest side of the Target 101 RSZ A which are necessary for restriction of public access into the target area, and the Superstition Hills area north of the Target 101 RSZ A.

Other MUC Changes: Other West Mesa MUC changes would be identical to Alternative A with the exception that Plaster City Open Area lands west of Target 103 would not be reclassified from MUC I to MUC L. Plaster City Open Area lands within RSZ A would be withdrawn to the Navy as in Alternative A.

Off-road Vehicle and Route of Travel Proposed Actions

Limited Areas: 20,260 acres of unclassified Navy Lease lands would be designated as limited to approved routes. This corresponds to the Alternative C MUC L area. Route approvals and closures within these limited areas would be identical to those proposed for the same areas under Alternative A. The proposed closures are for SF-366 and SF-377, the Target 103 and Target 101 run-in lines.

Open Area: 48,260 acres of unclassified Navy Lease lands and 1,120 acres of public lands along Wheeler Road which are currently limited to approved routes would be redesignated as open area. This corresponds to the Alternative C MUC I area. Vehicular access along the Target 103 run-in line (SF-366) would be prohibited except for right-angle crossings. The San Felipe Corridor and other primary access routes would be posted to assist the public in navigating through this large, relatively flat area.

Public Access Corridors: Two public access corridors would be established in the Parachute Drop Zone RSZ A to provide for public access between the Superstition Mountain and Plaster City areas. These two corridors would be the only portions of this RSZ A available for general public access (organized competitive events would be able to use other portions of RSZ A with Navy permission). The corridors would be conspicuously posted so that they could be found easily and followed by the public.

Wilderness: Wilderness management actions would be identical to those of the Alternative A.

Alternative C - Maximum Use (East Side)

Multiple Use Class Changes (Map 11)

MUC changes would be identical to those in Alternative A, except that MUC M lands within RSZ B around Target 68 would remain in MUC M.

Off-road Vehicle and Route of Travel Proposed Actions

Off-road vehicle designations would be identical to those of Alternative A, with the exception of MUC M lands within RSZ B lands around Target 68. These lands would remain limited to approved routes. All currently existing routes within RSZ B would be approved for use (Map 12).

Other aspects of recreation management of East Mesa would be identical to those of Alternative A.

Wilderness:

Wilderness management actions would be identical to those of Alternative A.

Introduction

In Alternative D, primary emphasis would be placed on conserving sensitive cultural and biological resources, as mandated by the FLPMA, the National Historic Preservation Act of 1966, the Archaeological Resources Protection Act, the Sikes Act, the Endangered Species Act, BLM Manuals 6500, 6840, 6840.2 and 8100, and Executive Orders 11989 and 11593. The objective would be to minimize recreational impacts to these sensitive resources while still meeting the operational needs of the Navy. Alternative D would also provide for continued competitive and non-competitive recreational use. The primary difference between Alternatives A and D is that D would afford greater resource conservation to areas south and west of Superstition Mountain and Target 101. Except for the specific items outlined below, this alternative is identical to Alternative A.

Multiple Use Class Changes (Map 13)

Unclassified Navy Lease lands to MUC L (60,520 acres): Alternative D would expand the Alternative A MUC L area through the addition of two separate units. The MUC L lands to the northwest of Target 103 would expand eastward several miles. The boundary between MUC L and MUC I would be adjusted to follow south along Route SF 274 at the southwestern base of Superstition Mountain. It would then turn toward the southwest following Route SF 404 to the 22, 23, 26, 27 section corner. Here the class boundary would follow the section line three miles south to the Parachute drop zone RSZ A. All unclassified lands outside of RSZ A areas that lie west of this line would be MUC L. This boundary would include numerous archaeological sites and extensive optimal habitat for the Federal candidate flat tailed horned lizard within the protective guidelines of MUC L.

A temporary closure of approximately 40 acres would be established in this area under authority from 43 CFR 8364.1. This location contains sensitive archaeological and Native American resources which have suffered impacts from off-road vehicle activity. The closure would be terminated when the values had been permanently protected or mitigated.

The second expanded MUC L area would lie south of the Target 101 RSZ A. The MUC L boundary would extend west from the proposed action location to the west edge of the Imperial Valley Rifle and Pistol R&PP shooting range. From here the boundary would move north along a proposed realignment of Wheeler Road to Imler Road. This projection of Wheeler Road is intended to provide a manageable and visible boundary east of MUC I lands with low known resource values. The realignment of Wheeler Road under Alternative D would follow a route two miles east of the alignments for Alternatives A and C (see Map 10). Designation of this area as MUC L would be for protection of sensitive vegetation and flat-tailed horned lizards.

Unclassified Navy Lease Lands to MUC I (8,000 acres): The MUC I lands proposed under this alternative were also considered for Class I designation under Alternative A. Features of significant recreational interest are present, such as the Ancient Dry Lake and the southern flank of Superstition Mountain, but this area contains limited biological and cultural values. The MUC I designation would recognize this area as an historic and important site for ORV free play.

Archaeological sites within the MUC I area are suitable for mitigation through data recovery. Several sites would be included within a 40 acre temporary closure located immediately south of the ancient Dry Lake. This closure would also be authorized by 43 CFR 8364.1 until such time as appropriate recovery had been implemented.

Off-road Vehicle and Route of Travel Proposed Actions

Recreation management would be in accordance with Section VI B of the proposed cooperative agreement. ORV designations would be changed as follows.

Limited Areas: 60,520 acres of unclassified Navy Lease lands and 500 acres of Plaster City Open Area lands would be redesignated as limited to approved routes (Map 13). Route approvals would be decided as described below. General public access would be permitted on all approved routes within these Limited Areas.

A route inventory would be conducted on the additional limited area (that which is outside of the Alternative A limited area). Specific recommendations for route closure and route approval would then be made after evaluating the routes against the criteria set forth in 43 CFR 8342.1, following the standard California Desert District route approval process. All routes recommended for closure in Alternative A would be so recommended in Alternative D. Through the route approval process, the public would be afforded an opportunity to review all additional route—of-travel proposals.

At least one public access corridor would be approved through the limited area between the Plaster City and Superstition Mountain Open Areas.

Desert races would be permitted on a designated race course system developed in conjunction with the route approval process. Enduros would be permitted on all approved routes, subject to review by BLM on a case-by-case basis. Pitting and mass starts would not be permitted within the limited area. BLM would obtain Navy concurrence before authorizing specific competitive events within RSZ B.

Open Area: Eight thousand acres of unclassified Navy Lease lands would be redesignated as an open area (Map 13). In addition, the Navy would agree to manage a small parcel of unclassified RSZ A land on Superstition Mountain as open area, even though the parcel would be withdrawn to the Navy. BLM would obtain Navy concurrence before approving competitive events or other recreation management actions in those portions of the open area falling within RSZs A and B.

Temporary Closure: A temporary closure of approximately 40 acres would be established at the south end of the Ancient Dry Lake under authority of 43 CFR 8364.1. This location contains sensitive archaeological and Native American resources which have suffered impacts from ORV activity. The closure would be terminated when the values had been permanently protected or mitigated. Upon termination of the closure, this area would be designated as open under authority of 43 CFR 8342.1.

Unclassified Lands: As in Alternative A, 1,280 acres of the Plaster City Open Area immediately south of Target 103 would be redesignated as unclassified and withdrawn to the Navy, in order to protect public safety. Alternative D would provide for the same unclassified areas as Alternative A. Management of these areas would be identical to that of Alternative A, with the following differences: within the Parachute Drop Zone, competitive events would be restricted to the approved routes shown on Map 4 and pitting would not be permitted. BLM would obtain Navy concurrence before authorizing competitive events in RSZ A.

Public access via Imler and Huff Roads would be eliminated through the unclassified lands around Target 101. Alternate access would be provided along the approximate alignment shown on Map 4. Thus, the alignment of alternate access would be different from Alternative A.

Public Lands Outside the Navy Lease Area: Recreation management and ORV designations in the cooperative agreement area north and south of the current Navy Lease boundaries would remain unchanged, except that BLM would obtain Navy concurrence before approving specific competitive events or modifying recreation management plans within RSZ B. Plans for the San Felipe Vehicle Corridor, the Ocotillo Wells State Vehicular Recreation Area expansion, and the Imperial Valley Rifle and Pistol Association shooting range would proceed as in Alternative A.

Wilderness: Wilderness management actions would be identical to those of Alternative A.

Alternative D - Minimum Use (East Side)

Multiple Use Class Changes (Map 14)

MUC Changes would be identical to those of Alternative A, except that T.15S., R.17E., Sec 19 NEI/4 would be designated as MUC L rather than being included in the RSZ A (Target 68) withdrawal. This 160 acre parcel contains high value wildlife habitat (a cattail marsh, and extensive mesquite and mesquite hummocks) as well as a variety of cultural resources.

Off-road Vehicle and Routes of Travel Proposed Actions

Off-road vehicle designations would be identical to those of Alternative A, except that the NEI/4, Sec 19, T.14S., R.17E., would be designated as a closed area rather than unclassified. This 160 acre parcel contains high value wildlife habitat and cultural resources.

AMENDMENT FOUR

MUC GUIDELINES FOR WASTE DISPOSAL

Section 6004 of the Resource Conservation and Recovery Act of 1976 requires that the Bureau comply with State programs which deal with the administration of refuse management facilities on Bureau-administered lands. In addition, the regulations and guidelines of other Federal agencies governing solid waste facilities must be adhered to by the Bureau.

These regulations and guidelines have become increasingly complex. Changes have increased the Bureau's responsibility to monitor the operations of existing refuse disposal sites which have been authorized by the issuance of a Recreation and Public Purposes Act lease or R&PP patent. Because the BLM is the "owner" of Federal public land, it could assume the primary burden of enforcement or clean-up of any health or environmental problem related to a solid waste facility located on lands leased under the provisions of the R&PP act as well as any lands patented by the Bureau (as a result of residual Federal interests stemming from reversionary provisions in the R&PP patent).

To reduce the Bureau's future liability, lands which may be suitable for sanitary landfills will be sold or exchanged rather than leased through the R&PP act.

AMENDMENT SIXTEEN

CADIZ DUNES - REVISE VEHICLE ACCESS

If Alternative A or Alternative B were accepted, a management plan would be prepared and implemented before opening the Cadiz Dunes to ORV use. The plan would outline steps necessary to properly regulate use and protect sensitive resources. The BLM would explore the option of obtaining state OHV funding for any required cultural resources survey, signing, drift fences, and other studies or materials necessary to implement the plan.

If any section of the Cadiz Dunes were opened to vehicle use, a seasonal ORV closure would be effective from March 1 to September 1 to offset biological impacts. The management plan would include several mitigation measures which are listed in Chapter IV.

		CAN	CANDIDA		TE AMENDMENTS	ENTS	S S	SUMMARY OF IMPACTS	3Y OF	IMPA	CTS		
	X = Positive Impact	pact							1	Negative	ive Im	Impact	Page 1
					RES	RESOURCES	ES				SN	USES	
Amendment No.	AMENDMENT	Soil - Air - Water	Botany	Wildlife	Horses - Burros	Cultural	Native Americans	Wilderness	Visual	Livestock Grazing	Recreation	Lends	Geology- Energy - Minerals
÷	NAVY COOPERATIVE AGREEMENT												
	Alternative A West Side	1	1	1		1	١					١	1
	East Side			×		١					1	1	1
	Alternative B (No Action)	1	1	1		1	١						
	East Side										×		
	Alternative C West Side	1	1	1		1	ı				×	ı	1
	East Side			1								ı	1
	Atternative D West Side		×	×							1	1	1
	East Side		×	×		×					1	1	1
2.	AGRICULTURAL USES												
9.	COMMUNICATION SITES												
4	WASTE DISPOSAL												
0	TRANSMISSION FACILITIES	70											
89	PLAN ELEMENT GOALS												
7.	Unclassified at BAKER EMNSA BOUNDARY												
	Alternative A								1				
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	Alternative C								×				
	Alternative D												
	Alternative E								>				

TABLE 2-4 CANDIDATE AMENDMENTS SUMMARY OF IMPACTS CANDIDATE AMENDMENT CANDIDATE AMENDMENT CANDIDATE AMENDMENT Candidate Candidate

* CVFTL = Coachella Valley Fringe-Toed Lizard

	X = Positive impact	Jact						10	## 		Negative impact	pact	Page 3
					RE	RESOURCES	ES				US	USES	
Amendment No.	AMENDMENT	Note:	Botany	Wildlife	Horse Burros	Cultural	Native Americans	Wilderness	Vigual	Livestock Grazing	Recree	Lands	Geology- Energy - Minerals
18.	WILD HORSES and BURROS - Morongo HMA			×	ı								
	- Coyote Cenyon HMA			×	1								
19.	CIMA DOME BURRO AREA	×	×	×	1					×			
20.	EAST SAN DIEGO COUNTY MFP												

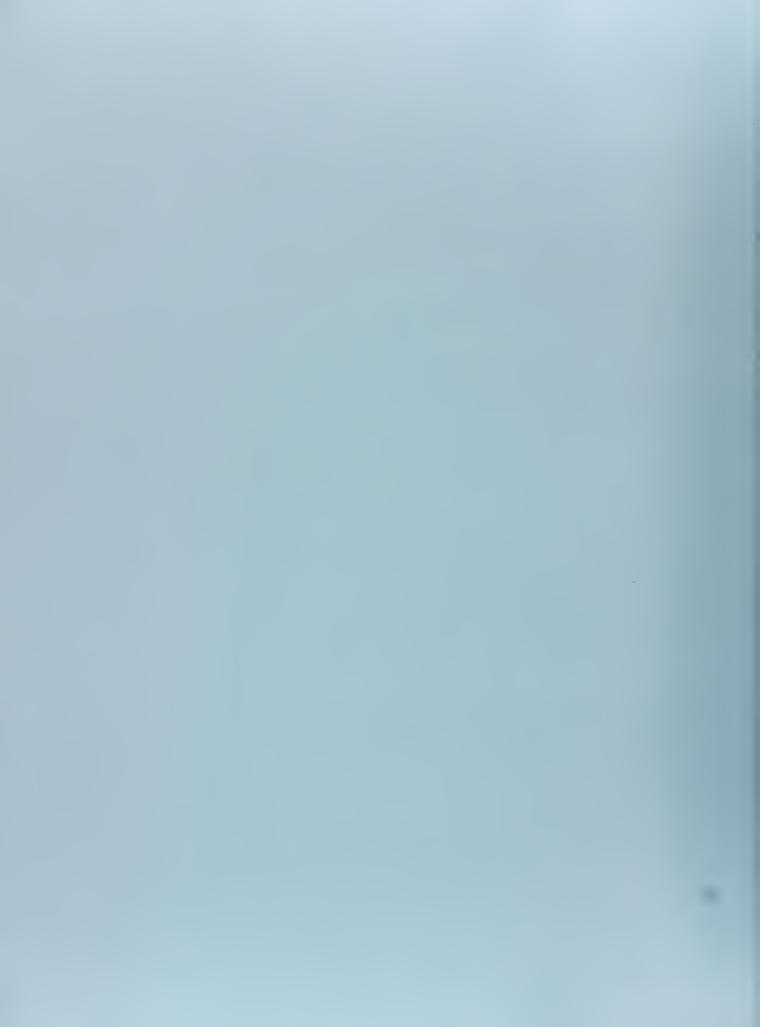
Table 2-5
SUMMARY OF CUMULATIVE IMPACTS

Resource	Unit of Measure	No Action	Preferred Alternative	Percent Change	New Percent of Desert
Multiple Use Class					
C L M I Unclassified	Acres Acres Acres Acres Acres	1,655,940 6,259,126 3,365,184 522,610 314,000	1,655,940 6,296,261 3,351,764 572,730 240,165	+ 0.0 + 1.1 - 0.4 + 3.1 -23.5	13.7 (17.3)* 52.0 (48.8) 27.7 (27.5) 4.7 (4.1) 2.0 (2.6)
Motorized Vehicle Access					
Open Limited Closed Undesignated	Acres Acres Acres	523,000 9,301,860 1,978,000 314,000	582,360 9,292,330 1,982,950 259,460	+11.3 - 0.1 - 0.3 -17.3	4.8 76.7 16.4 2.1
ACECs and Special Areas					
Added	Number Acres	0	1 34,461		
Deleted	Number Acres	0 0	0 7 90		
Net change	Number Acres	0 0	+1 +33,671		

^{*} Percent of Area in Original Plan



CHAPTER 3 AFFECTED ENVIRONMENT



CHAPTER III

AFFECTED ENVIRONMENT

GENERAL DESCRIPTION

The Affected Environment refers specifically to that area which may be impacted by aproposed amendment. In some amendments this may be extremely limited; in others it may apply to the entire California Desert Conservation Area.

Sources of information are available which discuss the affected environment adequately for this document:

- The California Desert Conservation Area Plan (including overlays), 1980.
- The Appendices for the Final Environmental Impact Statement and Proposed Plan, CDCA, September 1980.
- ACEC activity plans or other plans already completed for specific areas.

Abbreviations will be used in identifying references for this section, as follows:

- California Desert Conservation Area Plan, 1980: CDCA Plan.
- Maps contained in the CDCA will be identified by their number. For example, the map on Wild Horse and Burros, Map No. 8: Map No. 8.
- Appendices to the Final Environmental Impact Statement and Proposed Plan for California Desert Conservation Area will be identified by the letter of the volume and the number of the appendix. For example, Appendix II, Volume A (Summary of Decisions of Resource Values) would be abbreviated as Appendix A II. Other commonly used abbreviations are Areas of Critical Environmental Concern (ACEC), Wilderness Study Area (WSA), Geology-Energy-Minerals (GEM), and Multiple-Use Class (MUC).

Next is a brief tabular listing of references for the amendments being considered, followed when necessary by a more in-depth discussion of each amendment discussing major resource values which may be affected by the proposal.

Amend. No.	Title	Peferences
1	Navy Cooperative Agreement	
	A. West Mesa	CDCA Plan, Table 2 (ACEC 61, W-60): Maps 3,4,5, 10-15, 17; Appendix A-II, 489-498; Appendix C-IV, 46-48; Appendix C-VI, 139-143
	B. East Mesa	CDCA Plan, Table 2 (W-59); Maps 3-7, 10, 11,13-15; Appendix A-II, 483-488; Appendix B-II, 654-669
2	MUC Guidelines for Agriculture	CDCA Plan, Table 1; MUC Guidelines, p. 15
3	MUC Guidelines for Communication Sites	CDCA PLan, Table 1; MUC Guidelines, p. 16
4	MUC Guidelines for Waste Disposal	CDCA Plan, Table 1; MUC Guidelines, p. 20
5	MUC Guidelines for Transmission Facilities	CDCA Plan, Table 1; MUC Guidelines, p. 16
6	Revised Plan Element Goals	CDCA Plan, Chap. 3
7	Change MUC Classes and EMNSA Boundary in Baker Vicinity	CDCA Plan, Chap. 2, p. 14; Maps 11, 13-17; Appendix A-II, 240-241, 315-320.
8	T 4S, R 6E, Sec 10 Coachella Valley Fringe- Toed Lizard (CVFTL) Habitat	CDCA Plan, Chap. III, Wildlife Element, Table 2 (W-42); Maps 3-6, 11, 13- 17; Appendix A-II, 446-450; Appendix C-IV, p 56; "Coa- chella Valley Fringe-Toed Lizard Habtat Conservation Plan", Draft, August 20, 1984 by CVFTL Habitat Con- servation Plan Steering Committe.

9	Coachella Valley Fringe- Toed Lizard Habitat	Same as Amendment 8
10	Reclassify a portion of Panamint Range from Class L to Class M	CDCA Plan, Table 2 (ACEC No. 8, W-10); Maps 3-7, 11-13, 15, 17; Appendix A-II, 198-202; Appendix B-III, 142-162; Appendix C-IV, 6-8; Surprise Canyon ACEC Management Plan; Draft EIS, Proposed 1982 CDCA Plan Amendments, 4-83, 4-84.
11	Change land south of Johnson Valley Open Area from Class I to Class M	CDCA Plan, Maps 4, 6, 10-14, 17; Appendix A-II, 262-266; Appendix C-IV 35-36, Appenidx C-VI 202-211
12	Johnson Valley small tract area	CDCA Plan, Chap. 2, p. 14; Map 6. Appendix A-II, 261-262
13	Refine original ACEC boundaries	
13a	Clark Mountain ACEC (No. 19)	CDCA Plan, Table 2, (ACEC 19); Maps 3, 4-9, 11, 12, 17; Appendix A-II, 295-300; Appendix B-III, 333-338; Appendix C-IV, 15-16; Clark Mountain ACEC Management Plan and Clark Mountain Habitat Management Plan
13b	Yuha Basin ACEC (No. 64)	CDCA Plan, Table 2, (ACEC 64); Maps 3, 4, 6, 11, 13-17; Appendix A-II, 493-498; Appendix C-IV, 48-49; Yuha Basin ACEC Management Plan, BIM, 1981; Yuha Desert Wildlife Habitat Management Plan, BIM, 1983; Yuha Desert Management Plan, BIM 1985
13c	Gold Basin/Rand Intaglio ACEC (No. 67)	CDCA Plan, Maps 12, 13, 17 Appendix A-II, 479-482 Appendix C-IV, 50
13d	Plank Road ACEC (No. 72)	CDCA Plan, Maps 4-6, 10, 11, 13-17; Appendix A-II, 483-488; Appendix C-IV, 53-54.

14	New ACEC at Warm Sulfur Springs	CDCA Plan, 4, p. 123; Maps 4, 12-14; Appendix C-IV, p. 64.
15	Change unclassified lands within East Mojave Scenic Area to Class L	CDCA Plan, 4, p. 123; Maps 3, 4, 6, 8, 9, 12, 15, 17; Appendix A-II, 335-374.
16	Revise ORV Designations for Cadiz Dunes	CDCA Plan, Table 2 (W-41); Maps 3, 10-14; Appendix A-II, 405-408; Cadiz Valley/Danby Lake Draft and Final EAR, 1977.
17	Colton Hills Grazing Allotment	CDCA Plan, 3, Livestock Grazing Element; Table 6, p. 76; Maps 4, 7-9, 14, 17; Appendix A-II, p. 375-378; Appendix F-XIII, p. 44
18	Delete Herd Management Areas: Morongo, Palm Canyon, Coyote Canyon	CDCA Plan, Table 2 (ACEC 49, W-44); Table 5; Maps 3, 4, 7-9, 11, 13, 15, 17; Appendix A-II, 417-420, 445-450; Appendix B-III, 286-290, 605-609; Appendix C-IV, p. 37
19	Delete Cima Dome Herd Management Area	CDCA Plan, Table 2 (W-27); pp. 59-64, Maps 3-9, 12, 15, 17; Appendix A-II, 347-352; Appendix B-III, 362-365, 387-390
20	Modify Eastern San Diego County MFP to include lands acquired on 10/15/84.	Eastern San Diego County Planning Unit MFP. DEIS and FEIS for Eastern San Diego County Planning Unit.

SUPPLEMENTARY INFORMATION

AMENDMENT ONE:
NAVY WITHDRAWAL - WEST SIDE

Cultural Resources

Archaeological sites and Native American values comprise the cultural resources found within the study area. Ancestors of today's Kumeyaay Indians occupied environmentally favorable locations in search of food. Remains of their visits constitute today's archaeological record at West Mesa.

Prehistoric sites are scattered throughout the study area. The MUC I area identified within Alternative A received the bulk of study since this area will receive the brunt of impacts. Review of existing data plus new field work undertaken specifically for this project revealed at least two main areas of archaeological resources (Map 15). These are described below.

Prehistoric Environmental Perspective

The contemporary environment provides clues to past Native American use of the region. Hunting and gathering societies are inexorably linked to the existing environment. They performed little in the way of modification, such as agriculture, and literally lived off the land. Current environmental circumstances can be projected back for several thousand years. The bulk of archaeology found on the West Mesa dates from this period.

The West Mesa contains few nutritional plants which would have been available to Native American populations. Creosote dominates the landscape. This plant held no nutritional value to Native Americans, although it was widely used for medicinal purposes. Food plants include mesquite, wolfberry, and miscellaneous forbs, but these are present in small and uneven quantities.

Prehistoric people also used a variety of rocks for different tools. Granite and sandstone are locally available in and around Superstition Mountain for use as metates and manos. Porphyry and other fine grained stones are sparsely available as surface gravels along the western portion.

Water is perhaps the most important factor in predicting the location of prehistoric sites. Several sources existed within the study area. Lake Cahuilla, a vast inland fresh water sea, filled several times during the past two thousand years. Each episode created a new environment along the lake's fringe within the desert ecosystem. Aboriginal groups exploited fish, fowl, and plant resources found at the lake's perimeter. Portions of the Lake Cahuilla shoreline lie within the study area along today's 40 foot contour.

The landmark known as the Dry Lake may have been a marsh or small embayment when Lake Cahuilla was present. Such an environment would have attracted hungry prehistoric people because of its probable diverse plant and animal life.

The study area contains another source of water which presumably would have been available to the Kumeyaay and their ancestors. Several mudflats are present south of Superstition Mountain which, while normally dry, will hold water for several days after a rainfall. Two types exist. One consists of broad expanses of silted-in depressions which largely lack vegetation. The other type is characterized by an intermittent series of hummocks formed by creosote and wolfberry bushes. Finally, several dry streams cross the West Mesa area, which provide water after rainfall.

Previous Research

Archaeological research conducted in Westec Service's regional study in the West Mesa region has been described in detail by Gallegos (1980). Some of this work is summarized below.

Prehistoric sites on the Lake Cahuilla shoreline were recorded by Malcolm Rogers, of the San Diego Museum of Man, in the 1920s and 1930s (unpublished) and by Ben McCown, representing the Archaeological Survey Association (ASA), in 1953-1957 (unpublished). Further inventory in this area, as well as in the mud flat area south of Superstition Mountain, was reported by researchers at Imperial Valley College. Von Werlhof completed several lengthy transects across the West Mesa in 1983.

Dewey (1978) and Brooks et al (1977) performed sand and gravel inventories around the Ancient Dry Lake. Johnson (1976a) and Welch (1982, 1983a, 1984a), both of the BLM, conducted further inventories nearby. Both recorded sites containing accumulations of ceramics, stone tools, and camp fires.

Other BLM archaeologists conducted inventories in assessing possible impacts of the San Felipe motorcycle race corridor. They located sites associated with Lake Cahuilla and clusters of mesquite hummocks (Johnson, 1976b, Ritter, 1976, Musser, 1979). Only a few small sites were found in the creosote bush scrub community. BLM also inventoried several 80-acre transects within the study area during the preparation of the Desert Plan. Square mile transects were also done. Site forms were prepared, but no formal reports were written.

The Westec study mentioned above is the most comprehensive work in the region, although the inventory focused on areas south of the study area (Gallegos, 1980). Gallegos calculated a site density of 18.4 sites per square mile in the shoreline stratum compared to 4.1 sites per square mile for the surrounding creosote community. Similar differences could be expected in the study area.

Current Research

Field work for this project employed several approaches, including: (1) examination of previously recorded sites, (2) foot and vehicle spot checks, and (3) formal Class III inventory transects. Attention was focused on, but not limited to, the MUC I area identified in Alternative A. In all, sixteen days were spent in the field between June 27 and August 5, 1985. Thus, the effort was not a total inventory and additional sites are undoubtedly present.

Field visits to recorded sites provided a means to update existing forms and to compare current site conditions with those observed at recording. These visits also provided insight into factors supporting prehistoric use and settlement.

Spot checks were employed to examine inferences obtained from other field methods regarding site location. While not necessarily systematic, spot checks provided an opportunity to examine large amounts of territory in short periods of time. They were used in such high probability areas as the Lake Cahuilla shoreline, Dry Lake margin, stream margins, and portions of mudflat areas. Low probability localities were also examined to verify their negligible archaeological content. However, these spot checks cannot be used to assess future project—specific impacts.

Formal transects were also conducted on approximately 250 acres. These usually consisted of 40-acre parcels intuitively selected in areas of high or low sensitivity. The methods at such transects involved walking parallel transects at 30 meter intervals. The location of these transects is shown on Map 15.

Existing Cultural Sites

The archaeological record consists of several dozen prehistoric sites non-randomly distributed throughout the study area. Two site concentrations have been identified. The first consists of several camps associated with the ancient Lake Cahuilla. The second lies within the mudflat-hummock environment south of Superstition Mountain. Few archaeological values are recorded outside these areas. Much of the region is covered by the creosote bush scrub community, which is lacking in nutritional plant foods and, thus, is an unlikely place for prehistoric use.

Prehistoric sites associated with Lake Cahuilla in the project area range from isolated campfires to complex temporary habitation sites. These latter sites contain accumulations of pottery fragments, stone flakes and tools, manos and metates for seed grinding, and campfires or roasting pits. These artifacts are often concentrated in what archaeologists believe represent activity areas. The dietary habits of prehistoric Imperial Valley inhabitants are evidenced on the Lake Cahuilla shoreline sites as burned bone, shellfish valves, and carbonized seeds.

Archaeological site Imp-4953 is characteristic of a large, complex habitation area along the shoreline. This site, located in the proposed Navy withdrawal area, covers over 100 acres and contains at least 11 hearths, milling tools, charcoal, sparse flakes, ceramics (including a pigment mixing bowl), at least one arrowhead and a shell bead. The site form notes two suspected areas of midden accumulation.

Impacts to this site were recorded as slight on May 24, 1983. The site form states that "the only ORV tracks noted were on the southeast portion" (Collins, et al 1983). Today, the archaeological site has several motorcycle courses running across it.

Other archaeological sites on the shoreline have suffered severely. ORV traffic across one site has impacted an estimated 90% of the land. Charcoal stains have been laid bare in hard subsoil beneath surface sands by recreational traffic. Edges of the route are littered with ceramics, flakes, and several tools. Sand and gravel activity has also destroyed an unknown number of sites along the shoreline.

It is difficult to project the actual number of sites located on or below the shoreline within the study area. Inventory is not yet complete and some previous studies over-emphisized site numbers by recording isolates or individual features. Currently, over 30 archaeological sites are recorded along the shoreline from the existing Plaster City Open Area to the eastern edge of the Superstition Hills.

The mudflat-hummock environment covers several hundred acres and contains an impressive array of sites and individual campfire complexes. Dozens of discrete features are present containing fire-affected rock, ceramic fragments, stone tools or flakes, and an unusually high percentage of milling stone fragments. One complex site which contains a variety of artifacts and which might well represent a base camp for support of a number of small, discrete surrounding sites has been badly impacted by camping. Several motorcycle race courses converge at the site, further harming an already damaged resource.

The mudflat environment is crossed by several roads, a multitude of motorcycle race courses, and a sea of indiscriminate motorcycle tracks. Destruction of some archaeological sites is nearly total. Surprisingly, a number of the small archaeological features are intact. These have either totally escaped damage or have only been driven over only a few times.

This environment contains other important archaeological values. At least two separate human cremations are present. They appear as heavily burned bone fragments and scattered ceramic sherds. Both features are disturbed by the same motorcycle trail. Original notes (Taylor, 1974) for one of the cremations, Imp-1044, indicate the presence of a "pile of bone". This no longer exists, as repeated vehicle passes have scattered evidence of the cremation along several meters of the course.

Other mudflat environments in the study area are different from the one described above. They lack hummocks and do not exhibit the same level of archaeological evidence. In fact, extensive spot checks revealed scattered and very few archaeological resources.

The Bureau's responsibilities for protecting cultural resources are described in Appendix G. In part, the Bureau must "take into account" the effect of their undertakings upon cultural resources considered eligible or potentially eligible for inclusion on the National Register of Historic Places. Archaeological sites within the study area are significant and eligible for the National Register either singly or as a district.

The Lake Cahuilla site, Imp-4953, is typical of a site eligible on its own right. Others occur along the shoreline. These sites, in concert with smaller resources, represent the unique aboriginal use of the Lake Cahuilla shoreline and are eligible as a district. This document does not, however, constitute formal determination of eligibility for any sites or site complexes.

The combined research and scientific value of these sites is great and has been previously discussed for other West Mesa resources (Gallegos 1980, 1984; Schaefer 1985; Welch 1983b, 1984b). Information contained within these sites can yield data regarding food gathering techniques, prehistoric activities, lacustrine (lake) adaptation and possibly population movements.

Several sites are recorded beneath the 40 foot shoreline. These afford a special opportunity to study how people adapted to environmental stress. Such sites could only have been occupied as the lake receded and the lake-related ecosystem deteriorated. Questions exist regarding subsistence changes and population shifts.

The archaeological values found within the mudflat-hummock environment are considered both significant and eligible for the National Register, particularly due to the density of cultural material. Individually, with the exception of the large resource described above, these sites are relatively mundane. Collectively, however, they offer a unique research opportunity to broaden our understanding of the Valley's prehistory. Few examples exist in the California Desert of such intense use of an ephemeral pond situation.

Several research questions quickly arise regarding the archaeological evidence within this environment. What foods were gathered? For how long did this type of resource use take place? What is the relationship, if any, among individual features? What is the relationship between the small, discrete sites and the large ones? What role did the presence of Lake Cahuilla take in the use of this area? Additional research questions exist which enhance the scientific value of this unique area.

Cultural Resource Potential

Archaeological sites do not exist uniformly throughout the study area. To-day's enviornmental parameters make certain locations unlikely prospects to contain prehistoric remains. A tentative archaeological potential model (Map 16) brings together diverse information for use in resource management. This model does not replace the requirement for compliance with federal legislation. Most projects within the study area would still require consideration of cultural resources by the Federal agency involved, since even areas of low cultural resource sensitivity may contain significant sites.

The arachaeological potential model contains the following four zones:

High: Areas containing archaeological sites considered potentially eligible for the National Register and areas likely to contain eligible sites, such as the Lake Cahuilla shoreline. Sensitive Native American values may also occur in these areas.

Moderate: Areas containing archaeological sites considered of indeterminate status for the National Register and areas whose environments would be predicted to contain archaeological resources. This would include fringes of mudflat areas which may contain archaeological sites, but, so far, spot checks have not revealed any resources. Native American concerns are expected to be low to moderate.

Low: Areas which are predicted to contain only trival archaeological resources. The environments of these areas nearly preclude the presence of a site. A pure creosote community is one example. No Native American concerns are anticipated.

<u>Unknown:</u> Areas that have not been examined or spot checked. No Native American concerns are anticipated.

Native American Values

Native American values for the study area are poorly known. In part, this reflects the lack of projects designed to specifically address these values. The region has been examined either indirectly or from only a peripheral perspective.

Desert Plan staff members interviewed Native American representatives for input to the CDCA Plan. They recorded that the northern study area contains camp sites and trails. Their work did not address Superstition Mountain since it was located in the existing Navy lease.

According to data in the Phase II report for the APS/SDG&E Interconnection Project, both Superstition Mountain and Superstition Hills were considered sacred by Native Americans (Woods, 1982). The hills were considered special and a dangerous place because they were inhabited by spirits. They served as the site of shaman contests and selection of group leaders. Tests of strength among the Kumeyaay, Quechan, and Cocopah were also performed at one time in the hills. The Kumeyaay term for the area translates to "changing shapes".

An informational letter advised various Indian reservations and individuals prominent in southern California Indian affairs of the proposed action (Appendix F). Further, the letter requested input regarding concerns or issues for the area. One field visit was performed on July 30, 1985; it involved a BLM representative, three Kumeyaay, and an observer. The group traveled to Superstition Mountain and an area of high site density. The Kumeyaay present were against continuing the use of Superstition Mountain as an ORV play area, since they feared that archaeological sites would be vandalized and artifacts would be removed. They did not, however, corroborate Woods' data.

The Kumeyaay expressed interest in the site complex located around the previously described mudflat-hummock area. Again the group expressed fear of vandalism and artifact theft. One Kumeyaay summarized his feelings by saying:

"I want to protect them (the sites) because we come from these people... They (elders?) always say if you find something like that to take good care of it, to think about the people, how they lived and grew up... All things come to mind in this place....nobody knows. (USDI, BLM 1985)."

Human burials are considered sacred to the Kumeyaay and many other Native American groups. The group expressed concern and dismay over impacts to the cremation because "it's not good to disturb burials" (USDI, BLM 1985). Furthermore, the group felt that it was important to protect the remains from further disturbance.

The laws which provide the Bureau with guidance for Native American contact and management of their concerns are outlined in Appendix G.

Wildlife

General

The study area includes the following primary habitat types: creosote bush scrub, desert psammophytic, mesquite, desert riparian, dry desert wash, and saltbush. Specific project-related general wildlife inventories were not undertaken to determine species present; rather, existing information was utilized (USDI, BLM 1974; Lebo et al 1982).

Creosote bush scrub comprises the majority of the study area. Wildlife diversity is generally low in this habitat type. Species present include the side-blotched lizard, zebra-tailed lizard, western whiptail, desert iguana, horned lark, Merriam kangaroo rat, and coyote.

Desert psammophytic habitat consists of somewhat localized concentrations of sand; the largest area is on the flanks of Superstition Mountain. Reptile species are similar to those listed for creosote bush scrub and also include more specialized sand-dwelling species such as the sidewinder. Reptiles are the most abundant wildlife taxa present, and the level of use by birds and mammals is low.

Mesquite and mesquite hummocks provide food, cover, and nest and burrow sites. Reptile species are again similar to those found in creosote bush scrub. Birds include horned lark, sage sparrow, Say's phoebe, and Le Conte's thrasher. Mammals include roundtail ground squirrel, little pocket mouse, cactus mouse, long-tailed pocket mouse, coyote, and white-throated woodrat.

Desert riparian habitat (including marshland) is both unique and highly valuable to wildlife due to its diverse vegetation and persistent water availability. Typical species include Pacific tree frog, bullfrog, red-spotted toad, Woodhouse's toad, American bittern, marsh hawk, American kestrel, black-necked stilt, Virginia rail, deer mouse, bobcat, striped shunk, cactus mouse, and coyote.

Desert washes are utilized as travel corridors and nesting/singing areas. They provide thermal cover for many species. Reptile species are similar to those listed for creosote bush scrub. Bird species include black-tailed gnatcatcher, phainopepla, and Costa's hummingbird. Mammals include Merriam kangaroo rat, Botta's pocket gopher, coyote and spiny pocket mouse.

Species utilizing saltbush habitat are similar to those listed for creosote bush scrub.

Species of Special Significance

Species of special significance include:

- Species which are either included or are candidates for inclusion on Federal lists of threatened or endangered species.

- Species which are listed by the State of California as being in potential danger of extinction.
- Species designated as sensitive species by the BLM.
- Species included on the Audubon Society's Blue List of diminishing species (Tate and Tate, 1982). These are included because they have the potential of becoming Federal or State listed or candidate species.
- Game species and furbearers. These are included because of their economic value.

BLM policy on protecting wildlife species of special significance is outlined in Appendix H.

Inventory was carried out only for the flat-tailed horned lizard, a BLM sensitive species which is also a candidate for listing by the U.S. Fish and Wildlife Service. This inventory was designed to supplement existing inventory for the species in the study area (Turner et al, 1980). Inventory was limited to this species because of time constraints and because the greatest potential for impacts is to this species. Existing information was used to determine the status and distribution of other species of special significance (USDI, BLM 1974; Black 1980; Lebo et al 1982).

Discussion in this section will focus on species which are likely to be affected by the proposed action or its alternatives. Other species which will be unaffected or minimally affected are listed in Table 3-1. Additional information is included on the desert pupfish because it is a State-listed Endangered and a Federal proposed Endangered species.

Flat-tailed horned lizard: The flat-tailed horned lizard was once widespread in desert portions of south- eastern California, southern Arizona and adjoining portions of Sonora and Baja California, Mexico. The species has never been abundant, and populations have declined significantly in some parts of its range (Turner et al, 1978, 1980; Turner and Nedica, 1982). This decline and the effects of increased use and development of desert lands have led to the lizard being designated as a sensitive species by BLM and to its candidacy for listing by the U.S. Fish and Wildlife Service's Office of Endangered Species. Efforts in 1979 to determine the species' relative abundance and distribution led to the identification of four optimal (crucial) habitat areas: (1) southern East Mesa, (2) southeas- tern Yuha Basin, (3) north of Ocotillo Wells and Benson Dry Lake, and

(4) south of Superstition Mountain (Turner and Medica, 1982). Extensive monitoring in 1984 revealed significant declines in large areas of the Yuha (Olech, 1984), while work in 1985 has shown major decreases in several areas of East Mesa (Olech, in prep.). Because of its increasingly precarious status and the presence of identified optimal habitat within the present study area (i.e., south of Superstition Mountain), BLM performed specific surveys in order to more accurately determine lizard distribution and relative abundance in key portions of the study area which have been identified as potential optimal habitat (Rorabaugh, 1979).

TABLE 3-1.

Species of Special Significance in the West Side Study Area Which Will Be Minimally Affected By the Project.

Species	Significance	Known Occurrence
Desert pupfish	State Endangered; Federal proposed Endangered	San Felipe Creek (proposed critical habitat)
San Sebastian leopard frog	BLM sensitive	San Felipe Creek area; probably extirpated
American bittern	Blue list	Desert riparian habitat
Marsh hawk	Blue list	All habitats
Bewick's wren	Blue list	Desert riparian and mesquite habitats
Loggerhead shrike	Blue list	Mesquite habitat
Gambel's quail	Game species	All but psammophytic (near water)
Mourning dove	Game species	All but psammophytic (near water)
White-winged dove	Game species	All but psammophytic (near water)
Ground dove	Game species (fully protected)	All but psammophytic (near water)
Coot	Game species	Desert riparian (open water)
Mallard	Game Species	Desert riparian (open water)
Cinnamon Teal	Game Species	Desert riparian (open water)
Green-Winged Teal	Game Species	Desert riparian (open water)
Black-tailed jackrabbit	Game Species	All habitats
Desert cottontail	Game Species	All habitats
Ring-tailed cat	Furbearer (fully protected)	Coyote Mts.
Kit fox	Furbearer (fully protected)	All habitats
Muskrat	Furbearer	Desert riparian (near open water)
Raccoon	Furbearer	Desert riparian (near open water)
Badger	Furbearer	All habitats

Because of time constraints, study transects were concentrated in areas which are currently unclassified but which will be categorized into Multiple-Use Classes by this project. Special attention was given to areas proposed for Class I (Open Area) designation. A total of 43 transects were performed in 1985. This was supplemented by data from 71 transects done in 1979 (Turner et al., 1980).

Field work was conducted between 6/13/85 and 7/9/85. Transects were performed as follows. Horned lizard relative abundance in each square mile investigated was determined using a 2.5 mile triangular transect. Transect sides were 0.9, 0.8, and 0.8 mile. The length covered was determined through use of a walking pedometer calibrated to individual pace length. The 0.9 mile segment was generally oriented in a north - south direction. A compass was used to insure that investigators stayed in the transect line. Numbers of scat and lizards observed along the transect were recorded. Since some transects were performed by one investigator, and others by two persons, results were standardized by dividing the number of scat observed by the number of investigator hours spent on the transect. This also allowed standardization with 1979, transect results summarized in Turner (1980). Transect results are presented in Table 3-2.

In order to permit more accurate interpretation of the 1985 and 1979 data, four correlation transects were also performed. These were done by repeating transects originally established in 1979. Results of these transects are also presented in Table 3-2. Three of these showed increases, and one showed a decrease. Although the total of four transects is too low to allow a statistically valid determination, it would appear that the population trend in some portions of the study area is increasing. This may be due to weather conditions or to natural population cycles, or it may be due to sampling bias. If these increases are accepted as indicative of a general upward trend, interpretive error would tend to be of a type that undervalues areas studied only in 1979.

Transect results from 1979 and 1985 revealed that the flat-tailed horned lizard is quite abundant in much of the study area. The study area contains 39 sections of high density optimal habitat in which one lizard or 10 or more scats per hour were observed, 18 sections of medium density optimal habitat (5-9 scats per hour), and 23 sections of low density habitat (1-4 scats per hour). In addition, no scats or lizards were observed in 30 sections. Approximately 60 sections of potential prime habitat within the study area (Rorabough 1979) remain unsurveyed due to time limitations. These data are shown on Map 17. Data from 1985 reconfirm and bolster the earlier conclusion that the study area south and west of Superstition Mountain is optimal flat—tailed horned lizard habitat. Observed declines in the Yuha and East Mesa areas make the habitat in the study area even more crucial to the survival of this species.

The study area abuts the existing Class I Plaster City Open Area. This area and Superstition Mountain receive high levels of ORV recreation use (a total of approximately 70,000 VUDs in 1984). The trend of visitor use is increasing. Official designation of adjacent portions of the study area as Class I could lead to increased ORV use.

TABLE 3-2
Results of Flat-Tailed Horned Lizard Transects

	Range (E)		Lizərds	Scat/hr	year	Township (S)	Range (E)		Lizərds	Scat/hr	year
12	9	12	0	0	1979	14	12	5	0	17	1979
	-	13	Ö	7	11			6	0	2	**
		14	0	ó	H .			7	1	27	**
		15	0	1	99			8	0	2	11
		16	0	0				10	0	14	1985
12	10	7	1	13				11	0	18	11
12	10	8	0	0				13	1	18.7	**
		9	0	0	11			14	0	16.3	11
		15	0	0	н			17	0	7	1979
		16	0	o				18	0	1	**
		17	0	0	11			19	0	3	**
		18	1	5	11			20	0	7	**
		19	0	13	41			22	0	45	1985
		21	0					24	1	21	"
		22	0	1				25	ō	9	
		30		1				27	Ö	33	1985
			0	9				30	0	12	1979
10	1.1	31	0	3	11			32	0	15	1985
12	11	19	0	0				33	ő	20	1703
		20		0				34	ì	15	11
		28 29	0	0	11			35	ō	9.5	10
		30	0	0				36	Ö	0	
14	10					15	10	1	0	4.5	11
14	10	4 9	1 0	0				15	ì	0	1979
				1				22	ō	Ŏ	1),
		11	0	11	1985			23	Ö	Ö	10
		13	0	16				25	ŏ	ŏ	
		14	0	8				26	ŏ	6	
		15	0	3	1979			27	ő	Õ	
		23	0	4		15	11	1	0	0	
		26	0	9		13	11				1005
		35	1	8	**			3	0	27	1985
		36	0	0	"			4	0	6	
14	11	3	0	18	1985			5	0	24	
		10	0	9	"			6	0	11	
		11	0	0	1979			8	0	15	"
		12	0	1	"			9	0	42	
		13	0	18	"			10	0	40.5	1985
		17	0	20	"			12	0	0	1979
		18	0	29	1985			13	1	27	
		20	0	4	1979			15	0	1.5	1985
		21	0	2	11			16	0	31	**
			0	73	1985			17	2	2	10
		22	0	21	1979			20	0	2	10
		23	0 .	16	11			21	0	2	10
		24	0 0 <u>1</u> 1/	16 9 2	**			21 22	0	2 2 6.5	н
		26	0	2	14			27 28	0	8	86
		27	0	2	1979			28	0	4	00
		50	0	7	1985			29	0	0	н
		28	0	1	1985 19 7 9			32	0	0	1979
			0	6	1985 1979	15	12	5	0	14	1985
		29	0	1	1979			6	0	2	1979
		32	0	9	11			5 6 7 8	0	2	"
		33	0	17				8	0	ŏ	1985
		34	0	20				17	Ŏ	Ö	"
			0	5	1985			i	ŏ	2	1979
								2			

1/ Off of transect

After field work began, it was postulated that ORV use may improve flat-tailed horned lizard habitat (Zortman, pers. comm.). Therefore, the following attempt was made to determine the impacts of ORV use on flat-tailed horned lizard relative abundance in the study area. A walking pedometer was used to determine the length of transect covered. The portions of 14 transects crossed by ORV routes and tracks and the portions unimpacted by ORV use were recorded. For each transect, the number of scats per mile occurring in areas of ORV use was compared with the number occurring along unimpacted (no track) portions. Data was broken down into 0.01-mile segments of the transect. Statistical significance was measured by Chi Square analysis using Yate's correction for continuity (Thomas 1976) since some cell values of E; were less than 10. Scats per mile of disturbed transect were used as observed values, and scats per mile of undisturbed transect were used as corresponding expected values. This approach was developed in consultation with BLM Desert District Wildlife Biologist Larry Foreman, and methods and results are concurred with by CDFG Fisheries Biologist Glenn Black (pers. comm.) and USFWS Fish and Wildlife Biologist Karla Kramer (pers. comm.).

The results of the inventory rejected the hypothesis that scat distribution is independent of disturbance by ORV use. The number of scats per mile observed on ORV disturbed habitat was significantly lower than that on undisturbed habitat ($X^2 = 136.92$, X^2 .05 = 22.3621, d.f. = 13). A corrollary point is that, although section by section scat counts in portions of the study area are high, this appears to be due primarily to high counts on undisturbed (no vehicular track) portions of the transects.

Desert pupfish: The desert pupfish was once common in desert springs, marshes, and tributary streams of the lower Gila and Colorado River drainages in California, Arizona, and Mexico. It also occurred in portions of the Colorado, Gila, San Pedro, Santa Cruz (USDI, FWS, 1984), and Sonoyta Rivers (Mallette and Nicola 1980).

Dams, channelization, and other habitat disturbances have resulted in significant habitat loss. Populations of introduced exotic fish species have increased dramatically, to a point where the pupfish is an insignificant component of the fish fauna of its former range. The distribution in 1984 included Quitobaquito Spring (Arizona), San Felipe Creek/San Sebastian Marsh, Salt Creek, irrigation drains and shoreline pools around the Salton Sea (California), and the Sonoyta River drainage and Santa Clara Slough (Mexico). The Salt Creek, Sonoyta, and Salton Sea populations may be so low as to no longer be viable (Moore, pers. comm; USDI, FWS, 1984). The Santa Clara Slough population may also be in jeopardy (USDI, FWS, 1984). These serious declines are reflected in the species being listed by California as endangered (Mallette and Nicola, 1980) and also being proposed for endangered status by the U.S. Fish and Wildlife Service's Office of Endangered Species.

San Felipe Creek/San Sebastian Marsh, in the west side study area, is one of the few remaining habitats for the desert pupfish (Black, 1980; USDI, FWS, 1984). It has been proposed as Critical Habitat for this species (USDI, FWS, 1984), and has been designated as an Area of Critical Environmental Concern (ACEC) and Wildlife Habitat Area by the Desert Plan.

Vegetation

Existing Plant Environment

The vegetation in the study area falls within the Sonoran Creosote Bush Formation. Creosote (Larrea tridentata) and bursage (Ambrosia dumosa) are the dominant plants in this arid landscape. The creosote formation can be broken into several finer habitat types:

- 1. Creosote Bush Scrub is the most common vegetation on the West Mesa. In fact, it can be called ubiquitous. With it can usually be found bursage, an unobtrusive low, gray shrub. Other species, including dalea (Dalea emoryi, Dalea schottii), Mormon tea (Ephedra trifurca), and saltbush
 - (<u>Atriplex</u> spp.), may become locally dominant in response to soil and moisture changes, but the creosote and bursage remain present in low numbers. Springtime often finds this community to be carpeted in ephemerals, such as three-awn grass (<u>Aristida</u> spp.), fiddlenecks (<u>Amsinckia</u> spp.) and Spanish needles (Palafoxia arida var. arida).
- 2. Desert psammophytic vegetation, a unique community found on deep sandy soil, makes up less than ten percent of the West Mesa vegetation. It is concentrated on the dunes along Superstition Mountain and can also be found in the sand along washes and flats throughout the area. Plants that typify this community include California croton (Croton californicus), several Dalea species, and desert buckwheat (Eriogonum deserticola). Springtime flowers include verbena (Verbena spp.), milkvetches (Astragalus spp.), and desert sunflowers (Geraea canescers).
- 3. Mesquite (Prosopis glandulosa) is concentrated in the vicinity of Highway 78 near San Sebastian Marsh. Some portions of this community appear to be devoid of other perennial species, but usually creosote is present along with some saltbushes and wolfberry (Lycium cooperi). A number of dunes have been formed by mesquite in this area, ranging up to a height of 39 feet (Lebo 1982).
- 4. Desert Riparian Area. The West Mesa has one true riparian area, San Sebastian Marsh. With year-round water, the marsh supports vegetation that is anomalous in this region. Bulrushes (Scirpus olneyi), cattails (Typha domingensis), and halophytic vegetation such as pickleweed (Allen-rolfea occidentalis) and inkweed (Suaeda torreyana) can be found here. Surrounding these plants is an impenetrable stand of tamarisk (Tamarix ramosissima). This entire community sits inside the mesquite woodland described above.

Other communities of the West Mesa that are not as clearly defined include the desert washes, playas, and the saltbush scrub. The washes and playas depend on ephemeral waters. They are characterized by tamarisk and some mesquite. In addition, the playas often have a profusion of annual plants following spring rains. The saltbush scrub is dominated by saltbush, mixed with creosote and bursage. Additional plant associations are present in this area, but they are too small and too numerous to describe here.

Plant Species of Special Significance

The West Mesa contains a mosaic of mountains playas, sand hills, and washes. The potential for significant plant species in this region appears to be great. Numerous plants have been found within a twenty mile radius that are candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (i.e., Federal candidate species) and/or the State of California, or are listed by the California Native Plant Society (CNPS) in their "Inventory of Rare and Endangered Vascular Plants of California" (Smith, 1984). However, past inventories within the lease area have been few and have turned up minimal numbers of sensitive plants (Lebo 1982). Field work for this report met with similar results. The BLM policy on protecting plants of special significance is described in Appendix H.

Methodology

A review of existing information on sensitive species was conducted first, on the following data: 1) past surveys, 2) the California Natural Diversity Data Base (CNDDB, California, 1985), and 3) maps compiled by BLM botanists. Six days of field study were carried out from June 7 to June 17, 1985 by the El Centro RA range conservationist, assisted by two part-time volunteers.

In order to increase efficiency, the study area was divided into high and low priority zones. High priority areas included: (1) lands in RSZ A and B, (2) previously uncategorized lands being considered for Class I designation, and (3) unusual landforms. The low priority zones included parts of the RSZ C that are not being considered for multiple use class changes, and areas already inventoried. Most of the available time was spent on transects through the high priority zones. Inventory of the low priority areas was conducted primarily by vehicle with short examinations on foot. Species suspected to occur in this area are shown in Appendix H.

Significant Plants Observed

Due to the lack of prior study in this region and the brief time for inventory for this project, only a portion of the rare plants were located. More populations of all of these species are likely to lie in close proximity to the known locations. These results however show the presence, frequency and preferred habitat for the local significant species.

A total of five species of special significance were identified within the western study area. Of these, two are Federal candidate species, one is State listed and all are listed by the CNPS. The rare plants are described below. Known locations are shown on Map 18.

(1) Peirson's milkvetch (Astragalus magdalenae var. peirsonii) is a Federal candidate species, listed as endangered by the State of California, and by the CNPS (see Appendix H for details on CNPS listings). Known only from the Imperial Sand Dunes, Borrego Valley, and the West Mesa (Westec 1977), this plant was reported at one site near Highway 86. It was not observed elsewhere within the study area.

- (2) Wiggins cholla (Opuntia wigginsii) is also a candidate for Federal listing as threatened or endangered and is listed by the CNPS. This cactus is usually found at widely scattered sites. In 1980 three plants were reported from one location in San Sebastian Marsh (Lebo 1982). These may have washed down from a population in San Diego County (Ibid).
- (3) Salton milkvetch (Astragalus crotalariae) is listed by the CNPS as a "Plant of Limited Distribution". This plant grows in washes throughout the West Mesa. Over 500 plants were observed in seven locations during 1985 field work, and past inventories have also found it here (Lebo 1982). Its presence in one wash in large numbers and absence in the adjacent wash indicates a reliance upon flashfloods to move the seeds and establish new populations.
- (4) Thurber's pilostyles (<u>Pilostyles thurberi</u>) is listed by the CNPS. It is a very small parasite that grows on the branches of the shrub <u>Dalea</u> emoryi.

Prior discoveries of pilostyles in Imperial County have found a small number (1 to 6) of <u>Dalea</u> plants infected with the parasite in any one area. Field work for this report turned up several stands with more than 100 parasitized <u>Dalea</u> (see Map 18). Over 1000 pilostyles are present on the West Mesa in 24 populations. Because inventories did not thoroughly cover the entire project area, the actual number is undoubtedly higher. These are believed to be the most extensive stands of this plant in California.

(5) Sandfood (Ammobroma sonorae) was formerly listed by the U.S. Fish and Wildlife Service as a candidate for listing as threatened or endangered; it is still listed by the CNPS. Sandfood is a parasite on the roots of several species. The most common host is desert buckwheat, which occurs in heavy stands on the west and northeast portions of the study area and on Superstition Mountain. However the only sightings of sandfood in this area are near Highway 86.

The potential for additional unobserved populations of <u>Pilostyles thurberi</u> and <u>Astragalus crotalariae</u> in the West Mesa study area is a certainty. Although other species of significant plants may have more populations here, it is unlikely that they are sizeable. Values for floral sensitivity of the area are shown on Map 18.

Wilderness

A portion of the Fish Creek Mountains Wilderness Study Area (WSA CDCA-372) lies within the proposed boundaries of the cooperative agreement and within the proposed right-of-way for Target 103. Most of this WSA has been preliminarily recommended as suitable for inclusion within the National Wilderness Preservation System, but it will be up to Congress to make the final determination. Until Congress acts, it is BLM's responsibility to manage this area in a way which will not impair its suitability as wilderness.

Recreation

Recreation Management

Current off-road vehicle designations are indicated on Map 19. The Navy lease area is undesignated for off-road vehicle use.

Under a memorandum of agreement negotiated between BIM and the Navy in 1973, BIM issues permits for organized competitive events within the existing Navy lease area. The Navy retains management responsibility for other recreational activity. Competitive event permits are issued in accordance with an Environmental Assessment completed in 1975. Except for competitive events (and with the exception of county-maintained roads), the entire test range is closed to the general public except by permission from the commanding officer. However, the Navy has limited enforcement of this rule to occasional periods of special operations in specific portions of the test range. The area has a long history of use as an ORV free-play area with few actual restrictions. Typically, recreationists enjoy unchallenged access within the area unless they interfere with Navy operations around Targets 101 and 103 or threaten facilities. Management of recreational use on public lands outside the existing Navy lease area is in accordance with the 1980 Desert Plan.

A special project within the affected area is the San Felipe Vehicle Corridor, designed to link Ocotillo Wells State Vehicular Recreation Area (SVRA) with BLM's Plaster City Open Area. The corridor is one of three first-priority pilot projects designated by the State of California's OHV Recreational Trails Plan (State of Calif., 1983). BLM has received a grant from the State Off-Highway Vehicle ("Green Sticker") Fund to survey the proposed corridor route and to obtain rights-of-way across several parcels of patented land. The currently proposed alignment of the corridor is shown on the recreation use map (Map 14).

In another proposal, the State Department of Parks and Recreation plans to expand the Ocotillo Wells SVRA eastward in two phases. Although the feasibility of the proposal is still being studied, the tentative plan is to acquire BLM's adjoining Arroyo Salada Open Area and interspersed private holdings in

the first phase, and in the second phase to acquire the remaining public and private lands east to the Highway 78-86 junction (St. of Calif., 1981). These acquisitions would add a total of 52,000 acres to the SVRA, which presently encompasses only 14,590 acres (St. of Calif., 1981a).

Recreation Activities

ORV Recreation: Off-road vehicle playriding and touring are the dominant recreational activities occurring in the affected area. Since the area is served by few maintained roads, ORVs are also used as a means of engaging in other activities which include camping, mineral collecting or "rockhounding," hunting, nature study, and a unique spectator sport - target watching.

Superstition Mountain is the hub of ORV playriding activity because of the large accumulation of windblown sand on its crest and down the south slope. A feature known as the Sand Dam (a large dune situated between two of the mountains peaks) is a popular site for impromptu hill climb competition.

Superstition Mountain attracts not only local residents but ORV enthusiasts within a 100-mile radius, especially from the San Diego metropolitan area. Out-of-town visitors typically come for a weekend, camping at various locations off Imler Road and along the southern base of the mountain, frequently concentrating at a site near Imler Road's western terminus known as the Rockhouse.

Besides Superstition Mountain, other important playriding locations are Plaster City Open Area, at the southern end of the proposed cooperative agreement area, and the Arroyo Salada Open Area at the north end. Adjacent to Arroyo Salada and just outside the west cooperative agreement area boundary is Ocotillo Wells SVRA.

ORV touring takes place throughout the study area. Enthusiasts based at Plaster City, Ocotillo Wells SVRA or Arroyo Salada Open Area frequently make day trips to Superstition Mountain. A number of routes are used, one of which is the 92 kilovolt (kV) powerline route. All dry washes wide enough for vehicular passage serve as routes for touring. Together with a network of informal jeep trails, they facilitate driving throughout the study area. Cross-country travel is common in the flat central portion of the area, where there are few physical barriers. Another constructed route providing significant north-south access is the service road alongside the U.S. Gypsum Company railroad.

Besides casual ORV playriding and touring, the area supports organized ORV competitive events sponsored principally by the San Diego-based American Motorcyclist Association District 38. Pit locations are confined to the east and west pits on Plaster City Open Area and the area that the Navy has designated for this purpose around Ancient Dry Lake (Map 19). Event courses usually form loops so that both the start and finish points are located at the pit area. These loops have been confined by the Navy to that portion of the study area south and west of Superstition Mountain and Imler Road, excluding Target 103. Crossing the Sand Dam is usually permitted in several events each year.

The area where events are permitted is managed as a "sponsor option" area; that is, sponsors have been free to locate their courses anywhere that does not cross scattered private holdings or interfere with Navy operations. Consequently, competitive event courses have steadily proliferated and many are used by the general public as routes of travel. A recreational activity of comparatively recent origin is target watching, which seems to occur most frequently just off Imler Road near Navy Target 101. Visitors deliberately select campsites close to the target to observe military aircraft making practice bomb strikes. However, this activity is most commonly an offshoot of ORV use, as it is doubtful that recreationists come to the area primarily to watch military training exercises.

Other Recreation: Several locations within the affected area are of interest to mineral collectors. North of Highway 78, shells, garnet, travertine, and magnatite are collected. The lower Borrego Valley area south of Highway 78 is a collecting area for concretions, fossils, sand sculptures, agates, and calcite crystals. Superstition Mountain is also a very good area for collecting concretions and fossils. The Plaster City Open Area contains some collectable material from an ancient coral reef and fossil wood. Petrified wood, shells, fossils, concretions, and occasionally calcite crystals are found in the southwest corner of the area bordering the Coyote Mountains.

The best hunting areas are San Felipe Wash for dove and quail and the area's southeastern agricultural border for dove, quail, rabbit, and pheasant. Several other locations occasionally receive hunting use, although they are of relatively minor importance. Coyote and bobcat are hunted in the Superstition Hills. San Sebastian Marsh, southwest of the junction of Highways 78 and 86, is an area for goose hunting.

Nature study is popular with individuals and casual small groups and, on a formal basis, with groups affiliated with educational institutions. San Sebastian Marsh (southwest of the Highway 78-86 junction) is the most significant location for these activities. Its permanent water supply makes it a biologically unique area. It is also the site of an early Native American village of interest to archeologists. The marsh is part of San Felipe Creek National Natural Landmark.

Use Patterns, Statistics

The general zones of user concentration were described in the preceding discussions of each activity. Use is also concentrated during certain times. October through April is the major use season, and visitation is much higher on weekends than on weekdays. Summer recreation use (June through August) is very light. The transition months of May and September see moderate levels of activity.

In the current Navy lease area, several county-maintained roads off Huff Road provide direct access to the major zones of user concentration. Wheeler and Payne Roads serve the designated competitive event pit locations which also double as camping areas for the general public. Access to Superstition Mountain is gained primarily via Imler road, although off-road access from Ocotillo Wells and Plaster City is also important.

The study area is divided into four sections for the purpose of monitoring visitor use levels: (1) the current Navy Lease Area, (2) the Plaster City Open Area, (3) the Lower Borrego Valley and Arroyo Salada Open Area, and (4) San Sebastian Marsh and surrounding area. Recreation use is measured in Visitor Use Days (VUDs). Competitive ORV use is separated from other recreation uses. Competitive use was estimated from the number of participants and spectators reported by event sponsors; casual use estimates were derived from periodic BLM aerial visitor counts which have been conducted since 1977.

Estimated Recreation use in the study area in calendar year 1984 is shown in Table 3-3.

No attempt was made to break down the casual use figure of 96,000 VUDs by the various activities, because data was insufficient to produce a reliable estimate. However, for the study area as a whole, ORV use attracts the greatest number of recreationists. Use levels, in general, have been steadily increasing over the last decade, and this trend is expected to continue.

Visual Resources

In accordance with BLM's Visual Resource Management (VRM) Program, the affected area's scenic quality has been assessed and VRM classes assigned.

The bulk of the area is considered to possess only "Fair" scenic quality, due

TABLE 3-3: Recreation Use in West Side of Study Area in 1984

Location		Estimated Visitor Use		
and the control of th		Competitive Use VUDs/No. Events	Casual Use VUDs	
Navy Lease Area		14,000/18	56,000	
Plaster City Open Area		14,000/15	14,000	
Lower Borrego Valley and Arroyo Salada Open Area		0/0	23,000	
San Sebastian Marsh		0/0	3,000	
	Total	28,000/331/	96,000	

1/Many competitive events use both the Navy Lease area and the Plaster City open area. Therefore, the total number of events is less than the sum of events for each area.

to monotonous landscapes. Islands in this sea of monotony include Superstition Mountain and the Fish Creek Mountains. These areas are considered of "Good" scenic quality because of a greater variety of landforms and vegetation. San Sebastian Marsh has been rated as having "Excellent" scenic quality, because its permanent water supply and vegetation add variety to the landscape and make the area stand out as an unusual contrast to its surroundings.

VRM classes describe the degree to which human activities can be allowed to modify the landscape (USDI, Visual Resource Management). All of the locations with Good or Excellent scenic quality mentioned above have been assigned to Class II, meaning that changes caused by management activities should not be evident. Class guidelines dictate that contrast with the natural landscape may be visible, but must not attract attention. The remainder of the affected area north of Highway 78, as well as the Lower Borrego Valley south of the highway have been assigned to VRM Class III. Within this class management activities may be evident and begin to attract attention, but should still remain subordinate to the existing landscape. The bulk of the affected area south of Highway 78 is Class IV, meaning that modifications may not only attract attention but can be a dominant feature of the landscape in terms of scale.

Minerals

Oil and Gas (Map 20)

This area contains approximately 159,800 acres which are either under oil and gas leases or have pending oil and gas applications. Development potential is low due to geologic conditions.

Leases may last up to ten years. If the lessee voluntarily drops the lease or loses it due to failure to pay rental, the former lease area will become eligible for the simultaneous oil and gas leasing system or lottery. Leases are offered throughout the year.

Geothermal (Map 21)

In this area there are approximately 64,600 acres under existing geothermal leases or subject to pending lease applications. The significant area for exploration and possible development is the extreme north portion of this area, the Truckhaven Prospect.

Most of the area to the south of the Superstition Mountains within the existing Navy Lease Area has been explored by various companies through the use of 500 foot deep temperature gradient holes.

Potential for additional exploration is high in the extreme northern portion of the West Mesa and moderate for the area within the current Navy lease area. There are no Known Geothermal Resource Areas (KGRAs) in the subject area.

Saleable Minerials (Map 22)

The West Mesa contains approximately 900 acres which are encumbered by material extraction authorizations. It is estimated that an additional 36,400 acres have a high to moderate potential for sand, gravel, clay and rock riprap resources.

The source for the majority of the sand and gravel in the area is the shoreline of ancient Lake Cahuilla. This shoreline is situated at 40 feet above sea level and is the primary source for all sand and gravel products in the Imperial Valley.

Rock rip-rap sources in the subject area are restricted to the granite outcrops in the Fish Creek Mountains and the Superstition Mountains. Two quarries located on the southeastern end of the Superstitions constitute a major source of rock rip rap in the Imperial Valley and provide material for protecting dikes along the Salton Sea.

At the present time, the California Department of Transportation, County of Imperial, the City of El Centro, and five private operators extract material from the West Mesa. Annual production in 1984 was estimated at over 45,500 cubic yards of material at an appraised value of over \$17,200. Production is expected to increase due to the need for this material in water conservation projects throughout the Imperial Valley.

Locatable Minerals (Map 22)

Currently there are 34 association placer claims, three lode claims and two tunnel sites on a total of 5,580 acres. No plans of operations under the 43 CFR 3802 or 3809 regulations have been submitted on these claims, and the potential for development is unknown.

The Coyote and Fish Creek Mountains show potential for gold, silver, copper and limestone; the lower lands may contain gypsum and zeolite deposits, although no such deposits have yet been identified. The potential for exploration for these minerals is low due to the geologic nature of the area and to the high potential of known deposits outside the subject area.

Lands

Since aquisition of California from Mexico by the Treaty of Guadalupe-Hidalgo in February 1848, the Federal government has authorized a variety of actions, under various laws, within this area. These actions are recorded on the Master Title Plats (MTP) and associated Historic Index (HI). Copies of these MTPs and HIs are available for review at the Bureau of Land Management offices in El Centro, Riverside and Sacramento, California.

Within the West Mesa area, there are four groups of land holders. These include the Bureau of Reclamation (BR), the BLM, the Navy, and other landholders (including private, State, and local governments). Acreage held by each is shown in Table 3-4

TABLE 3-4
Land Ownership - West Mesa

Landholder	Acres	Percent
Bureau of Reclamation Bureau of Land Management Department of Navy Other (includes Private, State and local government) Total	167,327 24,745 1,160 80,016 273,248	61.2 9.1 0.4 29.3 100.0

Most of the Federal lands on the West Mesa area are withdrawn by the BR. This first form withdrawal, under authority of the Reclamation Act of 1902 (43 U.S.C. Chapter 12, as amended and supplemented), was implemented under a Secre-tarial Order issued on October 19, 1920 for benefit of the Yuma Reclamation Project. The BLM is the second largest Federal land manager. Most of the public lands are managed under FLPMA for multiple use and sustained yield. However, approximately 200 acres, in the very southwestern corner of the study area, was withdrawn by the BLM under Public Land Order 5224 (July 11, 1972) for the protection of recreation and public values (37 FR 13543). On September 28, 1959 the BLM classified approximately 983 acres as nonsuitable for agriculture, and on August 13, 1970 approximately 18,248 acres were classified for "multiple use" under authority of 43 CFR 2400. classifications preclude only land disposal actions. The smallest Federal land holding entity is the Navy, which acquired jurisdiction through Public Land Order 4880 (August 3, 1970) with a withdrawal of approximately 1,160 acres, in three seperate blocks, for the protection of Naval facilities (35 FR 12657).

Several cooperative agreements have been signed which affect the study area. On May 23, 1978 the BIM California State Director and the BR Lower Colorado Regional Director signed a Supplemental Land Resource Management agreement (BLM No. CA-105 and BR No. 8-07-30-L0088). This agreement provides the BLM with management responsibility for "... both Bureaus including multiple-use planning and management; multiple-purpose projects and planning; and environmental integrity, protection, and enhancement ..." on certain BR withdrawn lands, subject to specific conditions (Page 1, lines 13 thru 16). However, "... (t)he BR retains primary responsibility for management on lands ..." which are "leased" (Map 23-) (Page 1, line 18 et al). The BR "leased" portions within the West Mesa study area include the following:

- 1. Agreement 14-06-300-1848 of June 20, 1969 to the USN. This contains approximately 43,000 acres and includes the area formerly known as the Parachute Test Facility and several camera target sites. The term of this agreement is indefinite.
- 2. Agreement 14-06-300-2516 of March 26, 1969 to the USN. This includes approximately 5,560 acres involving Target 103A. The term of this agreement is indefinite.
- 3. Agreement 14-06-300-2516 of May 6, 1973 to the USN. This encompasses approximately 52,000 acres and contains the remainder of the "lease" area. The term of this agreement was for 5 years with one 5 year renewal. Although this Agreement has expired, day-to-day management of the lands has not been transferred to the BLM through amendment of the 1978 Supplemental Agreement.

Other Federal authorizations within the study area are rights-of-way, leases and permits. These include:

Rights	-of-Way	Grants

-	State	Highway	78	and	appurtenant	structures

- Material sites for Caltrans

- County's Imler, Huff, Payne and Wheeler Roads

- Telephone lines

- Imperial Irrigation District's (IID)

power transmission and distribution lines

- Tramroads

- Communication sites with access roads

- IID's Westsidemain, Fillaree and Thistle Canals

Authority

Act of 10/21/1976 Act of 11/09/1921

R.S. 2477

Act of 03/04/1911 et al.

Act of 03/04/1911 et al.

Act of 01/21/1895

Act of 03/04/1911 et al.

Act of 03/08/1891

Leases

- Imperial Valley Rifle and Pistol Club Range

Authority

Act of 06/14/1976

Permits

- Commercial photography

- Apiary sites

Act of 10/21/1976 Act of 10/21/1976

Except for permits, which are issued for a short duration, all the aforementioned authorizations are shown on Map 23.

Section 204 of the FLPMA requires review of most land withdrawals. Since passage of this Act the BR has been reviewing their withdrawals to determine if they should be retained to fulfill their mission or relinquished. Recently the BR has considered relinquishing approximately 76,000 Ac of their withdrawn land (Map-23). However, that this BR withdrawal remains in full force and effect until a revocation and restoration Order has been published in the Federal Register by the BLM pursuant to 43 CFR 2370.

Under Section 503 the BLM designated rights-of-way corridors to minimize adverse environmental impacts and the proliferation of separate rights-of-way. The CDCA Plan identified Contingency Utility Planning Corridor "Z". Through this area corridor Z is 2 miles wide and traverses the West Mesa study area from north to south along the existing 92-kV powerline (Map 7). According to the Plan "(t)his Corridor may be useful in transmitting energy from geothermal and possible solar generators associated with the Salton Sea if these become viable sources in the future "(CDCA Plan, Appendix XV).

On August 24, 1984 the Navy filed an imperfect application with the BIM California State Office under the authority of the Act of February 28, 1958 (P.L. 85-337), which is commonly known as the Engle Act. In this application the Navy stated their intentions to withdraw a total of approximately 318,000 acres in Imperial County, California (Appendix E) of which 192,072 acres are Federal lands on the West Mesa. As noted in Chapter II, the study area boundary approximates this proposed withdrawal as filed. In addition, owing to continued negotiations by the BIM and Imperial County with the USN, this application is still pending and has not been perfected (completed) to meet the Federal regulatory requirement of 43 CFR 2300 for processing.

AMENDMENT ONE:

NAVY COOPERATIVE AGREEMENT - EAST SIDE

Cultural Resources/Native American Values

The archaeology of East Mesa is considerably less complex than that of the West Mesa. The Lake Cahuilla shoreline also falls within the East Mesa study area, although estimates of archaeological site density are considerably lower than for the west side. The Westec study (Gallegos 1980) projected a hypothetical density of 11.2 sites per square mile along the East Mesa shoreline. Nonshoreline environments, which make up the bulk of the study area, are projected to contain 2.0 sites per mile.

Much of the study area would not have attracted large numbers of prehistoric populations for food gathering activities, since the lands are typically a homogeneous creosote bush scrub community, which usually lacks nutritional plants. Concentrations of mesquite (a food staple) are present, but their presence may be enhanced from seepage through the adjacent present day East Highline and Coachella Canals. Their prehistoric distribution and density is unknown.

The Desert Plan designated four separate cultural ACECs along the East Mesa Lake Cahuilla shoreline. ACEC 66 lies totally within the study area and partly within the proposed Navy withdrawal area (Map 24). The ACEC management plan, prepared and approved in 1984, outlines use restrictions to protect potential archaeological resources (Welch 1984). Sand and gravel extraction,

for example, is prohibited. The plan also calls for formal inventory, since the ACEC has never been systematically studied for the presence of cultural resources.

Original field work for this project consisted of searching for and locating a marsh environment within ACEC 66. This effort, conducted over portions of three days, involved a considerable amount of spot checking within the ACEC. The marsh and its immediate surroundings were encircled on foot. No other portions of the proposed withdrawal were examined because of the low probability for encountering sites.

Archaeological sites appear to be located close to the marsh and consist of ceramic concentrations, several suspected campfires, and at least one midden location containing a subsurface lens of fish bone, charcoal, and pottery. Dense vegetation made thorough examination of this microenvironment impossible. No archaeological resources were noted in the surrounding creosote bush scrub community during spot checks. The ACEC apparently contains few archaeological resources outside of the marsh environment or embayment shoreline of Lake Cahuilla.

Native American religious values are not known to exist within the study area. This area has not stimulated comment from the Native American community in the past. If, however, human burials were discovered, then the significance would increase dramatically.

Wildlife

General

The study area includes the following primary habitat types: creosote bush scrub, desert psammophytic, microphyll woodland, canal-influenced vegetation, mesquite, desert wash and marsh. General wildlife inventories were not undertaken to determine species present; instead, existing information was utilized (USDI, BIM 1977; USDI, BIM 1981a, USDI, BIM 1981b).

Species typical of creosote bush scrub include banded gecko, desert iguana, zebra-tailed lizard, western whiptail, red-tailed hawk, lesser nighthawk, white-crowned sparrow, Merriam kangaroo rat, desert kangaroo rat, roundtail ground squirrel, and coyote.

Desert psammophytic habitat is used by a variety of wildlife, including Colorado Desert fringe-toed lizard, sidewinder, western shovel-nosed snake, Le Conte's thrasher, black-tailed gnatcatcher, turkey vulture, prairie falcon, little pocket mouse, and roundtail ground squirrel.

Microphyll woodland is a unique and valuable habitat type within the study area, especially with regard to bird species. Typical wildlife species include side-blotched lizard, western whiptail, western diamondback, long-eared owl, turkey vulture, great horned owl, western flycatcher, warbling vireo, Cooper's hawk, roundtail ground squirrel, desert woodrat, coyote, and western pipistrel.

Canal-influenced habitat is characterized by arrowweed and tamarisk, as well as by cattails and other water-loving species. Much of this habitat has dried up since the Coachella Canal was lined, although some remains along the East Highline Canal. Species include Woodhouse's toad, leopard frog, bullfrog, desert iguana, marsh hawk, Say's phoebe, marsh wren, mockingbird, savannah sparrow, desert song sparrow, roundtail ground squirrel, coyote, valley pocket gopher, striped skunk and little pocket mouse.

Mesquite and mesquite dunes are utilized by sidewinder, long-tailed brush lizard, gopher snake, Anna's hummingbird, ash-throated flycatcher, verdin, Le Conte's thrasher, yellow-rumped warbler, white-crowned sparrow, coyote, little pocket mouse, and Merriam kangaroo rat.

Desert washes are used by wildlife as travel corridors as well as singing posts, nesting areas, and sources of thermal cover. Species include desert iguana, zebra-tailed lizard, roadrunner, western kingbird, mockingbird, roundtail ground squirrel, and coyote.

True marsh habitat characterized by cattails is of very limited distribution in the study area. Species are similar to those for canal-influenced habitat.

Of special note with regard to desert microphyll habitat and adjacent psammo-phytic areas are seven windmill water sources. These were installed by the California Department of Fish and Game (CDFG) as partial mitigation for the concrete lining and realignment of the Coachella Canal. The storage capacity of these drinkers was recently increased by Desert Wildlife Unlimited, a local sportsman's club, in cooperation with CDFG and BIM. These water sources are utilized by a variety of wildlife species including burro deer, coyote, dove, quail, screech owl, jackrabbit, turkey vulture, striped skunk, roadrunner, great horned owl, kit fox, and Couch's spadefoot toad (for breeding) (Rorabough and Garcia 1983).

Species of Special Significance

Species of special significance are defined in the previous discussion of the western portion of the study area. Again, specific project-related inventory was conducted for the flat-tailed horned lizard to supplement existing survey work (Turner et al 1980). Existing information was also used for Andrew's dune scarab beetle (Hardy and Andrews n.d.), burro mule deer (Celentano and Garcia 1984), and other game species and furbearers (USDI, BLM 1977; USDI, BLM 1981a; USDI, 1981b). Discussion in this section focuses on species upon which the proposed action and/or alternatives may have an effect. Other known wildlife species are listed in Table 3-5 as being present but unaffected or minimally affected. Additional information is included about the following species: Swainson's hawk, Colorado Desert fringe-toed lizard and Andrew's dune scarab beetle, all of which are candidates for Federal listing; the desert tortoise, which it is a Federal and potential State candidate for listing; the Yuma Clapper rail, which it is a State and Federally listed species; and the California black rail, a Federal candidate and State-listed species.

Flat-tailed horned lizard: The flat-tailed horned lizard is a BLM Sensitive Species and is also a candidate for Federal listing by the U.S. Fish and

TABLE 3-5.

Species of Special Significance Present in the
East Side Study Area but Which Will Be Minimally Impacted

Species	Significance	Occurence
Andrew's dune scarab beetle	Federal candidate	Psammophytic (primarily east side of sand dunes)
Desert tortoise	Federal/potential State candidate	Creosote bush
Colorado Desert fringe-toed lizard	Federal candidate	Primarily psammophytic habitat
Sharp—shinned hawk	Blue List	All habitats
Swainson's hawk	Blue List	Creosote bush
Marsh hawk	Blue List	All habitats
Long-billed curlew	Blue List	Microphyll woodland
Loggerhead shrike	Blue List	All habitats
Gambel's quail	Game species	All habitats
Mourning dove	Game species	All habitats (near water)
White-winged dove	Game species	All habitats (near water)
Ground dove	Game species (fully protected)	All habitats (near water)
Burro mule deer	Game species	microphyll woodland, creosote, desert wash
Desert cottontail	Game species	All habitats
Black-tailed jackrabbit	Game species	All habitats
Kit fox	Furbearer (fully protected)	All habitats
Badger	Furbearer	Creosote bush

Wildlife Service (for further discussion and description of inventory techniques see Species of Special Significance section under West Side). Although this species was present in the early 1960's in high numbers along Highway 78 (Mayhew, pers. comm.), inventories in 1978 and 1979 showed it to be present but uncommon (Turner and Medica, 1982). Project-related inventory in 1985 was limited because of time constraints. These surveys confirmed that the lizard is present in the area and found that its relative abundance in the areas surveyed is somewhat higher than in those areas investigated in 1978 and 1979.

Transect results indicate that the study area has 2 sections of medium density and 10 sections of low density optimal habitat. The lizard appears to be absent from 17 sections of the study area. The remainder of the east side study area from the new Coachella Canal west to about 1 mile east of the East Highline Canal is potential prime habitat (Rorabaugh, 1979).

Results of surveys in 1978/1979 and 1985 are presented in Table 3-6. The relative abundance of flat-tailed horned lizards is graphically portrayed on Map 25.

The study area overlaps approximately 10,240 acres of the East Mesa Wildlife Habitat Management Plan area. This area is managed by BLM in cooperation with the CDFG. A Habitat Management Plan for this area has been prepared jointly by these two agencies under the authority of the Sikes Act. A primary species of concern in the plan is the flat-tailed horned lizard.

Colorado Desert fringe-toed lizard: This species is a candidate for Federal listing by the U.S. Fish and Wildlife Service. It has been recorded in the Algodones Dunes and sandy portions of East Mesa.

Andrew's dune scarab beetle: The study area includes sites at which this species has been located (Hardy and Andrews n.d.). These are shown on Map 25. The beetle is endemic to the Algodones Dunes in Imperial County, California, and probably to the part of this dune system extending into Baja California Norte, Mexico (Hardy and Andrews n.d.). It specifically inhabits troughs of loose drifting sand between the dunes (USDI, FWS 1978), and is a candidate for Federal listing.

Desert Tortoise: Isolated desert tortoises may occur in the eastern portion of the study area, in areas which are not proposed for MUC changes. Densities are expected to be less than 20 tortoises/square mile, based on low densities found to the east of the study area (Nicholson 1984). These are below the lowest density used in the Desert Plan tortoise habitat delineation map (USDI, BLM 1981). This species is a Federal candidate and a potential State candidate.

Swainson's Hawk: This species is a candidate for Federal listing. It has been recorded sporadically in the Algodones Dunes and East Mesa.

Yuma Clapper Rail and California Black Rail: Although small marsh areas occur in the study area, they are unlikely to provide habitat for Yuma clapper rails or California black rails. They are either dessicated or are choked with vegetation and do not appear to provide suitable habitat or prey species. A survey on August 9, 1985, did not reveal any rails.

TABLE 3-6
Results of Surveys for Flat-Tailed Horned Lizards

Township (S)	Location Range (E)	Section	Lizards	Scat/hour	Year
12	16	20 28 31	0 0 0	5 2 0	1979
13	16	35 1 9 15 22	0 0 0	0 0 0	11 11 11
		26 27 36	0 0 0	2 4 21 3	11 11 10
13	17	21 31 33	0 0 0	0 0	11 11
14	16	1 12 13 23 24 25 36	0 0 0 0 0 0	3 1 6 0 0 0	11 11 11 11
14	17	2 6 7 13 14 15 18	0 0 0 0 0 0 0	0 1 3 5 0 0 1	" 1985 " 1979 " " 1985
15	17	20 30 35 1 2	0 0 0 0 0	0 2 6 1 0	1983

Vegetation

Existing Plant Environment

The flora of the East Mesa can be divided into two distinct formations: Sonoran Creosote Bush and Hot Sandy Desert (Kuckler in Barbour 1977). Sonoran Creosote Bush dominates the land in this area west of the Coachella Canal and east of the Imperial Dunes. The Hot Sandy Desert formation is on the Imperial Dunes. Although Kuckler described this area as being largely lacking in vegetation and without any dominant species (Barbour 1977), close examination reveals an abundance of endemic species. Habitat types occurring within these formations are the following.

Desert Psammophytic Vegetation: Psammophytic vegetation is that which is adapted to growing on deep sandy soils. This type includes all of the Imperial Dunes. But it can also be found on small inclusions within the East Mesa where sand has gathered along obstacles. Within the Imperial Dunes the common species include desert buckwheat, Wiggins croton (Croton wigginsii), and giant Spanish needle (Palafoxia arida var. gigantea). West of the Coachella Canal, the primary sand loving species are Mormon tea, desert buckwheat, and small Spanish needle (Palafoxia arida var. arida).

Creosote Bush Scrub: Creosote is ubiquitous in this habitat type. East of the sand dunes it mixes with large quantities of bursage and occasional ocotillo (Fouquieria splendens). On the East Mesa, however, it comes in to its glory. With many shrubs exceeding twelve feet in height, and often no other perennials in sight, this region transforms into a monotypic forest. In the springtime the interspaces between creosote come alive with wildflowers, including fiddlenecks & desert lilies (Hesperocaulis undulata).

Microphyll Woodland: The microphyll woodland grows in low depressions on the west side of the Imperial Dunes. Taking advantage of trapped water, numerous trees flourish here. Ironwood (Olneya tesota), palo verde (Cercidium floridum), and mesquite all abound. A heavy ephemeral understory including the orange flowered mallow (Sphaeralcea orcuttii) and brandegea (Brandegea bigellovii) thrive underneath the trees.

Additional habitat types are present within the study area in small acreages. Riparian areas dominated by tamarisk and arrowweed (Pluchea sericea) can be found where water seeps out of the canals. Mesquite is scattered through the East Mesa, forming small dunes which provide homes for the psammophytes. Other communities are relatively inconsequential in this area.

Plant Species of Special Significance

A large variety of significant plant species have been previously observed within the study area. With few exceptions, these occur east of the Coachella Canal where their presence has been well documented (USDI 1981a, USDI 1981b, WESTEC, 1977).

Methodology: Methodology was essentially the same as that for the West Mesa area. Past inventories had been conducted over the entire area. After review of this information four days of field work were conducted between June 10 and June 20 by the same people who worked on the West Mesa area.

Long transects were run on foot in the areas proposed for class changes. RSZ C lands not proposed to undergo any use changes received a brief inspection to confirm the results of earlier survey. The sensitive species considered likely to be found here are listed in Appendix H.

Significant Plants Observed: The significant species in this area include: 1) three candidates for listing as endangered or threatened by the U.S. Fish and Wildlife Service; 2) three plants that have been listed by the state of California as either threatened or endangered; and 3) two species that have been listed by the California Native Plant Society (CNPS) (Map 26). These plants are described below:

- 1) Pierson's milkvetch (Astralagus magdalenae var. piersonii) is a Federal candidate species which is also listed by the state (endangered) and by the CNPS. It is known only from the Algodones Dunes and areas west of the Salton Sea. It is present in scattered stands east of the Coachella Canal in the study area.
- 2) Desert sunflower (Helianthus niveus ssp. tephrodes) is a Federal candidate species which is also state listed (endangered), and is listed by the CNPS. It appears to be best developed in active dune areas (USDI 1981b), and is scattered through the dunes east of the Coachella Canal. One specimen was reported in 1979 growing alongside Highway 78 west of the Coachella Canal, (USDI 1981a), but it was not observed in 1985. No plants are known to be growing west of the canal.
- 3) Giant Spanish needle (Palafoxia arida var. gigantea) is a Federal candidate species and is listed by the CNPS. It also is scattered throughout the dunes east of the Coachella Canal. One dying specimen was reported west of the canal in 1979 (USDI 1981a), but it was not relocated in 1985. None of these plants were found on the East Mesa in 1985.
- 4) Wiggins Croton (Croton wigginsii) is state listed as threatened and listed by the CNPS. It is very common on the west side of the Imperial Sand Dunes, with occasional plants found on the eastern dunes. It was not observed within the East Mesa portions of the study area.
- 5) Sandfood (Ammobroma sonorae) is listed by the CNPS. A root parasite, it is only visible above ground for a short time each spring. It grows in scattered locations throughout Imperial County. In the study area, it is found east of the Coachella Canal throughout the sand dunes.
- 6) Borrego milkvetch (Astralagus lentiginosus var. borreganus) is listed by the CNPS. It is found primarily within depressions on the eastern side of the dunes. Within the study area, it is known from only three sites in the central portion of the Imperial Dunes (USDI 1981b).
- 7) Ribbed cryptantha (Cryptantha costata) is listed by the CNPS. This is an annual forb that was tentatively identified by Westec in 1977 near the railroad tracks on the northeast boundary of the study area (USDI, 1981b). This is the only report of this species within the region.
- 8) Coulter' Lyrepod (Lyrocarpa coulteri var. palmeri) is listed by the CNPS.
 Like Cryptantha costata it was tentatively identified in 1977 by Wester
 near the railroad tracks on the northeast boundary of the study area (USDI
 1981b). No other specimens are known from the project area.

Based on the field inventory for this document and past inventories, the incidence and potential for significant plants west of the Coachella Canal within the study area is very low. Values for floral sensitivity are shown on Map 26.

Wilderness

A substantial portion of the North Algodones Dunes Wilderness Study Area (CDCA WSA 360) is within the affected area. This WSA has been preliminarily recommended as suitable for inclusion into the National Wilderness Preservation System, and BLM must protect its wilderness characteristics until Congress makes a final decision on whether or not the area is designated as wilderness.

Recreation

Recreation Management

The major document which has guided previous recreation management decisions in this area is the 1972 Recreation Area Management Plan (RAMP) for the Imperial Sand Dunes. However, changes since 1972, including the 1980 completion of the CDCA Plan, have rendered this document in many ways obsolete. BLM is preparing a new Imperial Sand Dunes RAMP with completion targeted for 1986. Because of the considerable influence which the recreation area exerts over adjoining lands, the area immediately surrounding Target 68 and the strip between the old and new canals has been incorporated into the RAMP planning area. The remaining public land in the affected area will continue to be managed according to the general guidance provided by the CDCA Plan.

Recreation Activities, Visitor Use Patterns and Statistics

That portion of the proposed cooperative agreement area east of the Old Coachella Canal lies within the Imperial Sand Dunes Recreation Area (ISDRA), the most heavily and intensively used off-road vehicle recreation area in the California Desert. It attracts recreationists from a 250-mile radius, principally the Southern California coastal megalopolis from the Los Angeles area southward. Within the proposal are all of BLM's major developed sites in the dunes, including Imperial Sand Dunes Road, Cahuilla Ranger Station, and Gecko Campground (Map 27). These facilities and the entire portion of the cooperative agreement area south of Highway 78 and east of the New Coachella Canal are part of the Glamis/Gecko Open Area, the largest of three open areas within the ISDRA. Visitor use in that portion of the study area is projected at 250,000 VUDs for 1985. A portion of the smaller and less heavily used Mammoth Wash Open Area at the north end of the dunes is also within the study area. For 1985, visitor use for Mammoth Wash is estimated at 19,000 VUDs. Sandwiched between the two open areas is the North Algodones Dunes Wilderness Study Area (WSA CDCA-360), with about 70% of its acreage inside the study area. This area has also been designated as an Outstanding Natural Area and as a National Natural Landmark. Although lightly used at present, the WSA provides outstanding opportunities for primitive recreation and nature study. It is entered periodically by a number of colleges and universities for field trips and research projects. Contemplative recreational activities, including wildlife viewing, astronomy, photography, and hiking also occur. The area provides hunting opportunities for both upland game and deer in the more vegetated locations along its eastern border, and along the Coachella Canal on the western border.

The area south of Highway 78 and west of the Old Coachella Canal in the vicinity of Target 68 serves principally as a spillover camping and ORV playriding location associated with the ISDRA. Visitor use is estimated at 9,000 VUDs for 1985. Although these public lands west of the new canal are a limited area, meaning that vehicles are restricted to existing routes, recreationists have created many all terrain vehicle (ATV) play loops and dead-end camping spurs here. Most activity is near the old canal, extending west with decreasing intensity into the desert scrub. The heaviest user concentration occurs in the vicinity of the canal's junction with Highway 78.

The area north of Highway 78 and west of the Old Coachella Canal receives very light vehicle use. It is a limited area with few approved routes, and borders the WSA, a closed area. Its major recreation use is as a hunting area for upland game and deer. The roads paralleling the Coachella Canal provide important access between the Glamis/Gecko and Mammoth Wash Open Areas.

Like the West Mesa area described earlier, recreation use of the entire East Mesa/sand dunes area is heavily concentrated during weekends from October through April. Winter holidays such as Thanksgiving, New Year's and Presidents' Day attract ORV enthusiasts in large numbers, with Thanksgiving traditionally being the peak weekend. This holiday weekend alone generates 29% of the yearly visitor use days received by the ISDRA. Recreation use has been steadily increasing, with this trend expected to continue at least in the near future.

Visual Resources

Scenic quality east of the New Coachella Canal has been rated as Excellent owing to the visually spectacular elements of form and line exhibited by the Imperial Sand Dunes. Most of the area west of canal has received a "Good" scenic quality rating, although the western edge of the affected area extends into a zone of Fair scenic quality.

The Mammoth Wash Open Area, North Algodones Dunes WSA and the affected portion of Glamis/Gecko Open Area are VRM Class II, meaning that changes caused by management activities should not be evident. Contrast with the natural land-scape may be visible, but must not attract attention.

A Class III designation applies to the portions of East Mesa near the Coachella Canal, along Highway 78, and near the Holtville airport. Developments on these Class III lands can be visually noticeable, but must remain subordinate to the existing landscape.

The remaining East Mesa lands have been designated to Class IV. Here modifications may not only attract attention but may become a dominant feature of the landscape.

Minerals

Oil and Gas (Map 28)

The East side of the study area contains approximately 85,100 acres which are either under oil and gas leases or have pending oil and gas applications. Development potential for the area is considered to be low due to geologic conditions. These leases will be subject to inclusion in the simultaneous oil and gas leasing system or lottery upon expiration of the existing leases.

Geothermal (Map 29)

Approximately 11,300 acres are under geothermal leases or pending lease applications. The study area includes over 9,600 acres of public land within the East Brawley KGRA, 2,400 acres of which is under competitive lease, and over 10,200 acres within the Glamis KGRA, none of which has been leased.

Much exploration work has been done in the study area by private interests and governmental agencies using 500 foot temperature gradient holes. However, no test wells have yet been drilled in this area. Potential for the areas within the East Brawley KGRA currently under competitive lease is high to moderate. The rest of the East Brawley KGRA is only moderate because the geothermal resource is too deep to be economically utilized at this time. Lack of information makes it difficult to predict the potential of the Glamis KGRA and the rest of the subject area. However, due to the lack of leasing interest, the rest of the subject area is estimated to have a low potential for exploration and development.

Saleable Materials (Map 30)

The east side of the study area contains approximately 1900 acres which are encumbered by material extraction authorizations. It is estimated that another 1600 acres have a high to moderate potential for sand, gravel and clay resources. The California Department of Transportation, the County of Imperial, and nine private operators extract material from this portion of the study area. Annual production from this area in 1984 was over 54,300 cubic yards of material at an appraised value of over \$20,600. Production is expected to increase over the next few years due to new demands for material generated by water conservation projects in the Imperial Valley.

The East Highline Canal Sand and Gravel Management Plan (1983) addressed the potential and existing uses of the sand and gravel resources along the ancient shoreline of Lake Cahuilla (which is the source of all of these materials on the east side of the study area). Management of these resources has been proceeding according to this document since 1983.

Locatable Minerals (Map 30)

Currently there are 160 acres under one associated placer claim. No plans of operations under 43 CFR 3809 have been received for any activities on this claim, and its potential for development is unknown.

The potential for locatable minerals is estimated to be low due to the existence of a thick sequence of alluvial layers which cover the entire area. This sequence, up to 20,000 feet thick near the Coachella Canal, is not known

to contain any valuable locatable minerals such as gold, silver, copper, gypsum etc. The sand dune complex may have value as a source of silica sand, but its content of iron minerals (5%) make it unfit for most glass production. No production from this dune complex for any use except general fill material is known.

Lands

General information on lands and withdrawals is given earlier in this chapter in the discussion on Lands on the West Side of the study area. Only information specific to the East Side is given here.

Land holders on the east half of the study area and the acres held by each are listed in Table 3-7.

TABLE 3-7 Land Ownership - East Mesa

Holder		Acres	Percent
Bureau of Reclamation Bureau of Land Management Other (includes Private, State and local government)		74,339 20,868 4,994	74.2 20.8 5.0
and local government)	Total	100,201	100.0

Most Federal lands are presently withdrawn by the BR. This first form withdrawal was implemented under several Orders issued between 1909 and 1956 for the benefit of both the Yuma and Colorado River Reclamation Projects. Most of the public lands are managed under FLPMA for multiple use and sustained yield. On August 13, 1970 the BLM classified approximately 7,547 acres for "multiple use" under authority of 43 CFR 2400. This classification precludes land disposal.

The portions within the East Mesa area reserved or leased by the BR include the following:

- 1. Agreement 14-06-300-194 of June 3, 1954, to the Navy. This involves approximately 2,080 acres which is presently being used for targets. The term of this agreement is indefinite.
- 2. Agreement 8-07-30-L0080 of May 1978 to the BIM. This removes approximately 1,400 acres from transfer to BIM management, retaining these lands for BR sand and gravel reserves or wildlife mitigations. This Agreement identifies "(a) construction zone, 1,000 feet in width on each side of the existing rights-of-way of the Coachella Canal and on each side of the proposed new alignment along with all lands between the existing canal and the proposed alignment shall be maintained free of encumbrances, permits or leases to provide an unobstructed area" (Page 2, lines 6 thru 10). The term of this agreement is indefinite.

Other Federal authorizations within the study area are reservations, rights-of-way and permits. These include:

Federal Reservations	Authority
Coachella CanalGecko Road and CampgroundCahuilla Ranger StationWildlife Windmills	Act of 12/05/1924 Act of 10/21/1976 Act of 10/21/1976 Act Of 10/21/1976
Rights-ofWay Grants	
 East Highline Canal State Highway 78 Caltrans Material Sites County's Titsworth, Schoneman and Whitlock Roads 	Act of 03/03/1891 Act of 10/21/1976 Act of 11/09/1921 R.S. 2477
Permits	
Mobile ConcessionsCommercial filmingApiary sites	Act of 10/21/1976 Act of 10/21/1976 Act of 10/21/1976

Except for permits, which are issued for a short duration, all other authorized uses are shown on Map 31.

The BR has considered relinquishing approximately 42,000 acres of their withdrawn land, but reserving about a 2,000 foot wide corridor withdrawal for the new Coachella Canal (Map 31). However, the BR withdrawal would remain in full force and effect until a revocation and restoration Order has been published in the Federal Register by the BLM pursuant to 43 CFR 2370.

The CDCA Plan 1980 designated Energy Production and Utility Corridor M in this area. Corridor M is 2 miles wide and traverses the East Mesa along the western boundary (Map 8). At the present time no facilities utilize this corridor. However, the corridor is an alternative being considered for locating the Imperial Irrigation District's proposed 230-kV transmission line.

AMENDMENT EIGHT

COACHELLA VALLEY FRINGE TOED LIZARD HABITAT; SECT. 10, T 4S, R 6E

Wildlife

Section 10, T 4S, R 6E, is located on the western edge of the Coachella Valley Preserve. This Preserve and two smaller areas owned or managed by the BLM have been identified in the Coachella Valley Fringe-toed Lizard Habitat Conservation Plan (CVFTLHCP) as areas to be managed for the preservation of the CVFTL which is Federally-listed as threatened and state-listed as endangered. The HCP was written collectively by Federal, state and local entities and by representatives of conservation and development interests.

The HCP identifies those areas which are essential to the survival of the CVFTL. After the HCP is accepted by the U.S. Fish and Wildlife Service (USFWS) and the Preserve System has been established, the USFWS may issue Section 10a permits under the Endangered Species Act to permit local governments to allow development of CVFTL habitat on land outside of the Preserve System.

Except for the BIM-administered land in Section 10, T 4S R 6E, the primary 13,000 acre preserve was formerly entirely under private ownership. Recently, land acquisition efforts were begun by the BIM, the USFWS, the California Department of Fish and Game (CDFG), and the Nature Conservancy to consolidate the majority of land in the primary Preserve under public ownership. This effort is expected to be completed in the next two years. The BIM plans to acquire through exchange 6,700 acres within the Coachella Valley Preserve System. Two smaller preserves are already owned or managed by the BIM.

The Desert Plan identified unclassified lands primarily for the purpose of land tenure adjustment. Unclassified lands were generally small, scattered parcels which are difficult to manage and in many cases were felt to be more appropriately transferred to the private sector. However, the Plan does make provisions for retaining unclassified lands when those lands support sensitive species such as the CVFTL . In this case the current HCP, which the BLM helped author, identifies Section 10, T 4S R 6E as part of the Coachella Valley Preserve to be retained in public ownership for the management of the CVFTL .

Cultural Resources

The area surrounding Section 10 has been rated as having high sensitivity for cultural resources. However, no archaeological inventory has been carried out for Section 10. The section lies 1.5 miles from Thousand Palms Casis which was an important habitation site in prehistoric and early historic periods. Outlying sites related to the Thousand Palms site may be present within Section 10. Because of the importance of Thousand Palms, sites in this area may have Native American ethnographic value as well as archaeological values.

AMENDMENT NINE
COACHELLA VALLEY FRINGE-TOED LIZARD HABITAT

Cultural Resources

Recorded archaeological sites exist on several of the parcels proposed for reclassification. Site types are primarily trails and temporary camp sites. One site is currently undergoing National Register nomination procedures. Several parcels here have been fully inventoried and found to contain no sites at all.

Wildlife

See Amendment 8

Vegetation

Two BLM sensitive plant species (<u>Linanthus maculatus</u> and <u>Astragalus lentigenosus</u> var. <u>coachellae</u>) have either been recorded or are expected to occur on parcels affected by the proposed amendment. Both species are candidates for Federal listing and are under review by the USFWS. Occurence of these plants is as follows:

Little San Bernardino Mt. Linanthus (<u>Linanthus maculatus</u>) has been recorded in T 3S, R 5E, Sec 28.

Coachella Valley Milkvetch (Astragalus lentigenosus var. coachellae) is expected to occur in T 3S, R 5E, Sec 34 and in T 3S, R 3E, Sec 14, and 18. These parcels have not been field checked for this species at the appropriate time of year. However, the habitat appears suitable, and populations have been reported nearby.

AMENDMENT FOURTEEN
ESTABLISH AN ACEC AT WARM SULFUR SPRINGS

Wildlife

At least three springs flow onto the Panamint Dry Lake playa and have resulted in a unique desert marsh containing both aquatic and riparian habitats. Mesquite thickets surround the marsh on the north and south sides. Open water is extensive and attracts migratory waterfowl and shorebirds. Raptors are common and are attracted to the area, especially in the winter and spring season. Amphibians are also present. No formal surveys of flora and fauna have been counducted. Relict species of plants and animals may occur here. This marsh is a remnant of a more extensive aquatic and marsh environment that occurred in the region during the Pluvial lake period associated with glaciation of the North American Continent.

Minerals

No locatable mineral deposits have been identified in the subject area (CDCA Plan, Maps 11, 12). The lands are prospectively valuable for sodium, geothermal, and speculative oil and gas resources.

AMENDMENT SIXTEEN
VEHICLE ACCESS IN CADIZ DUNES

The Cadiz Dunes are located in eastern San Bernardino County approximately 50 miles east of Twentynine Palms. Running in a north-south direction along the eastern shoreline of Cadiz Dry Lake, the dunes covers approximately 90 square miles. The tallest of the dunes are immediately east of the north end of the dry lake. Moving south, the dune system drops progressively in height, tapering off to a series of low parallel ridges. At the southern end of the system along the western slope of Iron Mountain, the dunes are relegated to a thin sheet of sand which conforms closely to the underlying floor of Cadiz

Valley. Near the center of the dunes, the rocky and barren Kilbeck Hills jut out into the dune field, providing an interesting contrast to the shifting sands that surround them. Throughout the dunes, small "blowouts" and sand bowls occur where the wind has removed the sand cover, exposing the rocky, hard packed soil beneath.

Cultural Resources

Less than 1 percent of the proposed open area has received class II inventory for cultural resources. Existing data indicate very high sensitivity along the Pleistocene Lake Cadiz shoreline, which is the northeastern boundary of the proposed open area. Known cultural resources which consist of processing and procurement encampments, have possible National Register of Historic Places eligibility.

Wildlife

The Cadiz Dunes are habitat for specially adapted animals such as the Mojave fringe-toed lizard, western shovel-nosed snake, sidewinder, desert kangaroo rat and kit fox. A previously unknown genus and species of endemic beetle (Family Chrysomelidae) was identified in the dunes in 1979 by Andrews et al. Beetles in this family appear to be associated closely with primrose and other annuals during late spring and summer. This dune system comprises a simple, easily altered ecosystem. Existing vegetation is the key to the presence of biotic resources. Presently the Cadiz Dunes are well vegetated.

Vegetation

No Federal or state listed plants or animals are known to occur on the Cadiz Dunes. Perennial vegetation is sparse and restricted to interdune areas and the periphery of the dunes. Annual vegetation is found throughout the area, growing primarily in the spring months although summer annuals may be present if adequate rainfall occurs in July and August. Dominant vegetation includes burrobush (Ambrosia dumosa), creosote bush (Larrea tridentata), coldenia (Coldenia plicata), desert croton (Croton californica), sand verbena (Abronia villosa), indigo bush (Dalea emoryi), dune primrose (Oenothera deltoides), and Borrego locoweed (Astragalus lentiginosus var. borreganus). No unusual plant assemblages occur in the Cadiz Dunes.

Recreation

The area addressed in this amendment is designated as MUC L. The northern 9,280 acres are closed to vehicle access; the remainder is limited to use of existing routes of travel. In a sand dune system, such a limitation is impractical since routes of travel cannot be readily delineated. To eliminate this type of ambiguity, the Desert Plan's Vehicle Access Element (as amended) adopts the policy that all dunes and dry lakes be designated either open or closed to vehicle use.

Human use of the Cadiz Dune system has been extremely light, limited to day hiking, picnicing, photography, and ORV use (dune buggies and more recently, ATVs). Recreational use is limited almost exclusively to winter weekends, with most use concentrated around three and four-day holidays such as Thanksgiving, Christmas, New Years, and President's Day.

Ranger patrols have documented a slow increase in use over the last five years, with ORV-related uses making up 90 to 95 percent of the total use. Because of a lack of hard surface access, ORV use has traditionally been concentrated near Kilbeck Hill, with only a few groups preferring the higher dunes. In both cases, ORV activity has generally been focused on barren unstable dune slopes rather than on the interdune valleys where vegetation is more prevalent. Non-ORV-oriented users have tended to use the higher dunes.

Minerals

Although mining claims filed on much of the dunes, there has been very little exploration activity. Some of the roads in the area were built to provide access to these claims.

Land Tenure

Approximately 10 sections of private land under Alternative A, and 13 sections under Alternative B would be located within the open area. The area immediately south of the proposed open area (Alternative A) was contaminated by military ordinance during military training maneuvers during World War II.

AMENDMENT SEVENTEEN
COLTON HILLS GRAZING ALLOTMENT

Wildlife

The lands within the Colton Hills Grazing Allotment and south of I-40 (11,000 acres) make up approximately 7.5 percent of the leased lands. The western portion of this land falls on the northern slopes of the Clipper Mountains. The eastern portion is typical desert bajada. Livestock graze seasonally south of I-40 in the Clipper Mountains. The cattle occasionally range beyond the boundaries of the grazing allotment into bighorn habitat in the Clipper Mountains, where they forage on the slopes and use a water source also utilized by the bighorn.

No specific information is available on the impacts of livestock grazing on bighorn sheep in the Clipper Mountains. Limited data collected by the CDFG during the past year shows the presence of viral diseases in bighorn populations in several nearby mountain ranges where cattle are present but a relative absence of these diseases in nearby mountain ranges with little or no livestock.

Bighorn sheep migrate between the Clipper Mountains and the Marble Mountains to the west. In April of 1985, an aerial census was taken of the Marble Mountains where there is only occasional livestock grazing. The census showed a healthy and expanding bighorn sheep population of at least 150 individuals, 45 rams, 71 ewes, and 34 lambs.

The bighorn herd in the Clipper Mountains is at best stable and may be declining. It is estimated at as many as 40 individuals, based on a May 1983 census which yielded 32 sheep. The April 1985 census in the Clippers counted 4 rams, 12 ewes and no lambs.

AMENDMENT NINETEEN
DELETE CIMA DOME HERD MANAGEMENT AREA (BURROS)

Wildlife

No Federal or State-listed threatened or endangered plants or animals are known to occur in the HMA, nor is it an important habitat for any BLM sensitive species. The Cima Dome Habitat Management Plan Area falls within the HMA. This joshua tree forest provides habitat for wildlife, particularly several species of birds.

Wild Horse and Burros

The Burro population in this HMA was approximately 55 in 1980 when the Desert Plan was completed. Since that time burros have moved into the White Roch pasteur and Thomas pasteur areas. An inventory in 1984 set the estimated population in the HMA at 85 burros. Vegetation utilization is heavy. Black grama, a key forage species, appears to be decreasing in density.

AMENDMENT TWENTY
EASTERN SAN DIEGO COUNTY MFP

The newly acquired lands are indistinguishable from surrounding public lands. Surveys have shown both soils and vegetation to be similar (USDA 1973; USDI, 1978). A corral and an eroded stockwatering pond are present on the Section 20 parcel; comparable improvements can be found on nearby public lands. Grazing use on these properties has been at the same level as that on adjacent land within the livestock allotment for over forty years.

CHAPTER 4 ENVIRONMENTAL CONSEQUENCES



CHAPTER IV

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This chapter provides the scientific and analytic basis for the selection of the preferred alternative. It discusses the significant impacts that are anticipated to result from both implementation and rejection of each of the amendments. Both the beneficial and adverse impacts affecting the environmental components, as discussed in Chapter 3, will be documented. This chapter also includes: mitigating measures needed to enhance beneficial impacts or lessen adverse impacts; unavoidable adverse impacts which cannot be mitigated; the relationship between short-term use and enhancement of long-term productivity; and irreversible or irretrievable commitments of resources.

Knowledge of the area and professional judgement, based on observation and analysis of similar conditions and responses in similar areas, have been used to infer environmental impacts where data is limited.

The analysis of the amendments is based on the following assumptions:

- Funds and personnel are available for implementation.
- Impacts will be monitored and adjusted as necessary.
- Minor adjustments in management may occur.
- Baseline data are accurate.

Within each amendment analysis, the discussion is organized by resource. Only those resources affected are discussed. A resource that is not expected to be affected is not addressed. Except where specifically noted, no impacts on air quality are anticipated.

SPECIFIC IMPACTS

AMENDMENT ONE:

NAVY COOPERATIVE AGREEMENT - WEST SIDE

Alternative A: Proposed Action

Cultural Resources

Several types of adverse impacts are expected to affect cultural resources as a result of Alternative A. These can be described generally by definitions given in Federal regulations (36 CFR 800.3(b)):

- 1) Destruction of all or part of a property (site);
- 2) Isolation from or alteration of the property's surrounding environment;
- 3) Introduction of visual, audible, or atmospheric elements, that are out of character with the property or alter its setting;
- 4) Neglect of a property resulting in its deterioration or destruction...

The BLM cannot authorize actions which will result in impacts to significant cultural resources without first meeting the provisions of Section 106 of the National Historic Preservation Act (as amended). Consultation with the state Historic Preservation Officer (SHPO) is being initiated at the present time, and full compliance with existing legislative mandates will be achieved prior to a final decision on this amendment. Appendix G contains additional information on the compliance process.

Presently existing impacts are expected to continue, increase, or, in a few instances, decrease under the Proposed Action. These impacts are described below.

Cultural resources within the study area have been damaged under conditions described by items 1, 3, and 4. Specific impacts can be largely linked to recreation activities. Vehicle free play, indiscriminate off-road activity, and camping have combined to adversely affect archaeological resources and Native American values.

Other sources of negative impacts exist. Years of military activity have created substantial surface disturbances. Operational facilities, bomb targets, and access roads have altered the West Mesa landscape. Finally, several electrical transmission lines and material extraction sites are present within the study area. These actions may have adversely affected cultural resources.

Recreational use of West Mesa currently represents the most widespread impact within the project area. Specific impacts from off-road vehicle travel include:

- 1) Burial of artifacts and features;
- 2) Disturbance of the relative location between artifacts and features;
- 3) Destruction of the environmental data and relationship to the site or feature:
- 4) Breakage of individual artifacts; and
- 5) Increase in erosion.

Furthermore, vehicle impacts are incremental and cumulative. A single ORV pass constitutes a relatively minor impact for most sites, but one vehicle pass invites another, with the ultimate result of permanent loss of resources.

Motorcycle racing activities can also significantly impact cultural resource values. Pit areas and mass starts can totally obliterate large areas. The race itself is usually limited to a single track which greatly reduces impacts. Race experience in the Yuha Desert indicates that course cutting can occur with a proliferation of adjacent and parallel tracks. Finally, additional impacts may arise from emergency or support vehicles driving cross country parallel to the course.

Outdoor camping is another popular recreation activity within the study area. The list of potential impacts from camping is similar to that for vehicle travel, with the additional impact of possible skewing of the archaeological record by the remnants of camping activities. Camping is usually more intensive and more localized than cross country vehicle travel. It frequently promotes the formation of ATV play loops which can badly damage any existing cultural resoures.

Lands within the proposed Navy withdrawal may be subject to both negative and positive impacts. Adverse effects include bombing activities, new target development, cross country search vehicle traffic, and remote controlled target vehicle traffic. Each of these and a multitude of additional activities usually associated with military operations can cause surface disturbance and impact archaeological properties.

Some of the greatest impacts to cultural resource values may stem from a lack of management and visitor control. The Ancient Dry Lake area south of Superstition Mountain serves as a good example of the fallacy of benign neglect and illustrates impacts arising from management neglect. In the mid-1970s BLM and Navy entered into a cooperative agreement which resulted in the south Superstition Mountain area being recognized as a "sponsor-option" area. This allowed motorcycle race organizers the option of establishing race courses anywhere within the Navy lease outside of target areas. This resulted in effectively creating an open area. Cultural resources suffered significant impacts as a result of this practice (see Chapter III).

The Navy will assume management responsibility for cultural resources within their withdrawal area. The Navy will acquire responsibility for compliance with the antiquities legislation and procedures described in Appendix G. If the Navy allows unrestricted vehicle access within their lands, as has happened in the past, then significant negative impacts can be projected for cultural resources.

Positive impacts may, however, arise because of the Navy withdrawal. If vehicle use restrictions are enforced, then additional surface impacts will be confined to current levels. Limiting surface disturbance translates to a net increase in the protection of cultural resource values. Archaeological resources, it should be noted, can only benefit indirectly from positive impacts. Such actions only serve to diminish the possibility of negative impacts. Certain multiple use classes and area closures, for example, are designed to maintain the amount of disturbance to existing levels. Prehistoric sites can not be created. The archaeological record of our past constitutes an irreplaceable resource which is continually losing bits of data through negative impact. The very act of collecting and recording site information results in the destruction of the resource. Once an archaeological site has been excavated it can never be recreated.

Alternative A would assign 28,900 acres to Class I, and 45,160 acres to Classes L and M. Multiple Use Classes L and M would offer some protection to cultural resource values as described in Appendix G. The archaeological resources and Native American values in the Class I area would be subject to intense impacts and possibly great loss of integrity.

The Class I area contains several site concentrations which contain abundant and fragile scientific data. Continued ORV traffic would virtually ensure that they would sustain adverse effects. The open area also contains at least two human cremations, which are sensitive to the Native American community. The Kumeyaay have said that ORV travel over these burials would defile them.

Alternative A would temporarily protect cultural resources in two areas. Several sites near Aancient Dry Lake and portions of another site complex containing Native American values would be closed until appropriate data recovery could be performed. The effectiveness of this action would depend on BLM enforcement, public compliance and the speed of obtaining funds for a contractor. Other sensitive areas outside these closures would also be subject to impacts described above.

Wildlife

Several types of negative impacts might occur to wildlife as a result of the proposed action. These include the following:

Impacts related to casual off-road vehicle (ORV) use: The character and quality of the plant community are major factors in determining the composition, abundance, and diversity of wildlife. ORV use - especially casual, cross-country riding - reduces shrub density, canopy cover, and diversity, and reduces annual and perennial herbaceous species diversity (USDI, BLM, 1981a). This leads to a reduced food base, reduced cover, and reduced sites for nesting and burrowing - all direct negative impacts to wildlife. Repeated driving on sand hummocks would destroy them and the habitat they provide (USDI, BLM 1981a). Individual animals would be crushed and displaced, and burrows would also be crushed. Casual use can lead to habitat fragmentation.

Impacts related to competitive ORV events: In intensely used areas, such as spectator areas and race pits, soil compaction and surface disturbance are serious long lasting impacts to the environment (Stebbins, 1974; Vollmer et al, 1976). Soil provides physical support, water and mineral nutrients for plants and habitat for burrowing animals. Compaction produces an increase in soil bulk density and a loss of soil pore spaces which may reduce or eliminate penetration of roots and alter the soil temperature regime (Snyder et al, 1976; Stebbins, 1974). Seedbeds and root systems can be destroyed by the increased density of soil, lack of air and water, and increased rate of temperature fluctuation in compacted soil. All of these factors may make it difficult or impossible for animals to construct and live in burrows in compacted soils. In addition, emergency service vehicles travel parallel to race routes, or they may travel cross country to reach damaged vehicles or injured participants. This further expands the areas impacted.

Impacts associated with camping: Campers usually remain on harder surfaced areas. However, their use of motorcycles and ATVs radiates out into the desert and creates play loops. Impacts are similar to those outlined above.

Noise Impacts: Noise resulting from vehicle use can impact wildlife. Several authorities (Bondello, 1976; Romney, 1976) have documented noise impacts on reptiles, birds, and mammals. Noise has limited the hearing ability of desert iguanas. Hearing loss in the Mohave fringe-toed lizard occurred after exposure to dune buggy sounds of 95 dBA and 100 dBA (Brattstrom and Bondello, 1979). Noise can disrupt social and reproductive functions of birds that rely on auditory signals. It may alter predator-prey relations to one or the other's disadvantage. The greatest impact would occur during spring and early summer (USDI, BLM, 1981a).

Impacts related to Multiple Use Class Changes: Certain impacts would result from MUC changes alone. These include the following:

Unclassified Navy Lease Lands and MUC M to MUC I: All of the above types of negative impacts would occur in these areas. Primary species affected would be those associated with creosote bush scrub and psammophytic habitat types, which comprise the bulk of this land. Some areas such as Superstition Mountain, the Ancient Dry Lake, and the Rockhouse are already heavily impacted. Other areas would receive increased impacts, since public use in the area shows an upward trend.

Negative impacts would be especially significant with regard to the Federal candidate flat-tailed horned lizard. It has been demonstrated that horned lizard relative abundance is significantly lower in ORV-disturbed habitat than in undisturbed portions of the study area (see Chapter III for details). As ORV use proliferates, this would become an increasing problem. Impacts would be greatest in the area proposed for change from U to I which contains about 8,240 acres of high density optimal habitat, 4,320 acres of medium density optimal habitat, 4,320 acres of low density, and 5,280 acres of potential (unsurveyed) optimal habitat. The lizard appears to be absent only around the Ancient Dry Lake. Therefore, significant reductions in the lizard population could be anticipated. These, coupled with significant reductions in lizard relative abundance in the Yuha and East Mesa crucial habitat areas, present the possibility of significant overall reductions in habitat on public land.

Unclassified to MUC L: Overall impacts would be slightly positive. These areas have generally received little ORV use; Class L designation would limit the amount of future use. Primary species affected would be those associated with creosote bush scrub habitat. This change would include 1,760 acres of high density, 480 acres of medium density, 1,760 acres of low density and 6,720 acres of potential optimal habitat for the flat-tailed horned lizard.

MUC M to MUC L: Impacts would be negligible.

MUC I to MUC L: Because of the small area involved, impacts would be negligible. Localized positive impacts would result from limitations on ORV use. This area includes about 640 acres of high density flat-tailed horned lizard habitat.

Unclassified Remaining Unclassified: Management of these areas, including compliance with the Endangered Species Act, would permanently devolve to the Navy. Although the ultimate goal of the Navy is to prohibit public access (except on a case by case basis for competitive events), it is likely that public use would continue due to limited enforcement of restrictions and spillover from adjacent BLM lands. Therefore, the ORV-related impacts described previously would continue and might even increase in some areas.

In addition to ORV-related impacts, Naval activities would occur in these areas. These include direct habitat-disturbing activities such as bombing, parachute dropping, use of heavy equipment, use of flares associated with nighttime bombing, localized strafing, use of remote-controlled moving targets travelling cross-country, and parachute recovery teams and other personnel moving cross-country. The severity of these impacts would depend upon the

level of military use. As long as the current level and pattern of use continues, impacts are likely to continue at their present level except for some increase in surface disturbance due primarily to additional cross-country vehicle use. However, if the number of targets, locations of targets, or types of uses change, areas negatively impacted would increase. In a worst case situation, the withdrawn area's wildlife values could be virtually lost. Noise impacts related to low flying aircraft could be similar to ORV-related noise impacts.

Species affected would be those associated with creosote bush and psammophitic habitats. These areas also include about 7,680 acres of high density, 1,760 acres of medium density, 4,000 acres of low density and 8,800 acres of potential optimal habitat for the flat-tailed horned lizard. Should current Naval operations increase, impacts to this species could be significant.

MUC I to Unclassified: Impacts would be negligible.

MUC M to Unclassified: Because of the relatively small area involved, local impacts would be negative but not significant. Although public use of the area would theoretically be prohibited, compliance would depend upon the level of enforcement. It is likely that public use would continue and might even increase, with associated impacts as outlined above. The area contains about 1,280 acres of high density and 640 acres of medium density optimal flattailed horned lizard habitat.

MUC C, L, M and I Remaining Unchanged: There would be no impact. This includes proposed critical habitat for the Federally proposed endangered desert pupfish.

Vegetation

Alternative A would have no impacts on vegetation within MUCs that remain unchanged. On lands that are presently unclassified or will undergo a MUC change, the primary impacts to the vegetation would occur as a result of soil disturbance and the crushing of vegetation by motor vehicles. Among rare plants, none of the State-listed or Federal candidate species would be affected; known populations and habitat would continue under current management. However, Thurber's pilostyles, a CNPS-listed plant, could be negatively impacted. A discussion of specific impacts follows.

ORV impacts to vegetation have been discussed repeatedly in prior BLM environmental analyses (USDI, BLM 1978c, 1981a). Studies show that ORV use compacts soil, reduces the germination of wildflowers, and increases the density of weedy species. It reduces the diversity of both annual and perennial harbaceous species and also reduces shrub density, canopy cover, and diversity (Davidson 1973; Gibson 1973; Keefe and Berry 1973; Davidson and FOx 1974; Luckenbach 1975; Stebbins 1974; USDI 1980b). Pit areas and trails used for motorcycle races in the Mojave Desert suffered severely compacted soils and had significantly lower plant densities and cover than did surrounding areas (Davidson and Fox, 1974). An analysis of the 1974 Barstow to Vegas race showed that major negative impacts occurred to the vegetative cover and soils (Wilshire and Nakata, 1976). Due to the low rehabilitative nature of the

desert environment, the loss of native vegetation and topsoil may be permanent. Studies of vegetation and soils in the Colorado and Mojave deserts showed that disturbed vegetation may not recover for up to fifty years (Vasek et al, 1975; Clark 1979).

Plants of special significance on the West Mesa would be negatively impacted by ORVs. They would be crushed by vehicles and suffer habitat degradation through soil compaction and increased competition with other species.

Unclassified Navy Lease Lands and MUC M to MUC I: Vegetation within the proposed MUC I area is approximately 90% creosote bush scrub and 10% desert psammophytic vegetation. These communities would be subject to the negative ORV impacts described above. Vegetation near the Ancient Dry Lake has already been eliminated from small areas due to random ORV use and organized competitive events. Continued recreational activity would concentrate on already disturbed areas and would gradually radiate onto adjacent land. Any possible vegetative recovery on existing trails would be negated by continued use. Trails would probably grow in width, as vehicles pass each other or avoid bad spots on the trail, thereby compacting adjacent soils.

The popular sand hills along Superstition Mountains would be denuded of vegetation by heavy ORV use as has happened in the similarly vegetated open areas of the Imperial Sand Dunes.

Less popular portions of the open area would initially be impacted by the use of a small number of trails. This has been the only impact from past spill-over use from public lands. It also reflects the type of impacts in the adjacent and similar Plaster City Open Area. As the popularity of the area increased, vegetative cover and composition would be affected as it has been in the heavily used areas.

The relocation of Wheeler Road would result in the removal of vegetation over a four mile distance. Construction would also crush vegetation and compact soil along the roadway. In addition, new roads have been found to facilitate the invasion of undesireable introduced species (Johnson et al 1975). On the other hand, there may be some positive impacts from the road. Studies in the Mojave desert have shown that areas adjacent to unpaved roads do tend to have greater shrub biomass and annual plant diversity (ibid). This may be due in part to reduced competition and greater availability of water.

Two plant species of special significance are present within the MUC I boundaries: Thurber's pilostyles and salton milkvetch (see Chapter II). Thurber's pilostyles are found in large numbers on the West Mesa. Five populations, four of which exceed forty plants apiece, occur in the east portion of the intensive use area (Map 18). They are found on level ground adjacent to washes and are susceptible to indiscriminate vehicle use. They represent 55 percent of the known pilostyles remaining on public land in the West Mesa and would be negatively impacted by increased vehicle use.

Three populations of salton milkvetch have been identified within the washes of the MUC I area. Because of its affinity for washes, it would suffer from competition with ORV's, especially where washes are used as routes of travel. This milkvetch would not be severely impacted, as it is normally a short-lived plant (Munz, 1974). The threat to it on West Mesa comes from the possibility of being crushed before it sets seed and from soil compaction, which would prevent regeneration.

Unclassified, MUC M and MUC I to MUC L: Impacts to vegetation in the newly designated MUC L regions would generally be minimal. Vegetation in this MUC is almost exclusively creosote bush scrub and has historically received little or no ORV use. This designation would preserve that trend. The continued use of competitive event courses would eliminate any chance for vegetative recovery along those routes. Additional soil compaction and crushing of shrubs would occur along the sides of the course.

Three populations of pilostyles and two of salton milkvetch are known to grow in this area. Unsurveyed high quality habitat for both species exceeds 4,000 acres. No impacts are expected to these plants by the proposed action.

MUC I and MUC M to Unclassified and Unclassified Remaining Unclassified: The severity of vegetative impacts in this creosote bush scrub community would be dependent on the level of military use. As long as present military levels of use on these parcels continued, the vegetative community would remain unaffected. However, if the number of targets increased or changed location, if new construction occurred or if additional roads were created, plants would be removed or crushed. Under heavy military activity, the possibility exists that much of the existing vegetation and all significant species would be destroyed.

Soil compaction (with its resulting negative impacts) and crushed vegetation would be caused by continued competitive events in the Camelot and Bullhead Parachute Drop Zone. Each approved new route would further adversely affect vegetation.

All populations of rare plants on unclassified lands are in Target Area 101. Eleven populations of pilostyles are found there, four of which include over ninety individuals apiece. Four populations of salton milkvetch lie in the same area. Impacts would be the same as described above for general vegetation. The one positive impact to vegetation within an unclassified withdrawal area would be protection from ORV use.

Wilderness

This alternative would not impair the suitability of the Fish Creek Mountains WSA (CDCA-372) for wilderness designation. The right-of-way granted the Navy within RSZ B would qualify as a "temporary" action according to the IMP, since it would authorize no new surface disturbance and could be terminated if necessary for wilderness management. The right-of-way would allow continuation of existing overflights of a portion of the WSA by Navy aircraft. These overflights were in progress at the time the area was inventoried for wilderness characteristics and are not expected to change significantly in number or frequency. The Fish Creek Mountains are remote, inaccessible, and seldom visited and are expected to remain that way even in the event of wilderness designation. Overflights are not expected to conflict with wilderness recreational use.

The proposed right-of-way and cooperative agreement would provide for liaion with the Navy to minimize overflight conflicts. If the WSA were designated as wilderness the right-of-way would be reviewed during preparation of the wilderness management plan to ensure its compatibility with wilderness management.

Recreation

Impacts to visitor opportunities: This alternative would primarily impact off-road vehicle recreation, both casual use and organized competitive events. Impacts reflect the series of compromises necessary to balance differing uses and values. Impacts would be both adverse and beneficial, but the overall impact would be a positive recognition of off-road recreation opportunities, particularly opportunities for the casual user. Longstanding ORV use of the Superstition Mountain area would be recognized and made legitimate through designation of 27,780 acres of open area. Alternative A would assure continued ORV access to Superstition Mountain and, over the long term, would result in enhancement of ORV recreation opportunities.

On the other hand, casual recreationists would lose ORV free play and cross country driving opportunities on the 40,740 acres of unclassified Navy Lease lands being redesignated as a limited area. As mentioned in Chapter III recreationists now enjoy almost unrestricted access within the Navy Lease boundaries. The 56,000 casual visitor use days received annually in this area are heavily concentrated in ORV play activity on and around Superstition Mountain. Alternative A designates as an open area only the south-facing slope of the mountain; the north-facing slope would become a limited area. Although the majority of ORV play sites are on the south slope, the entire mountain receives ORV play activity. The popular "Sand Dam" straddles the crest. Inside the triangular-shaped limited area between the mountain and the Target 101 unclassified area are small sand dunes which attract ORV play. The other unclassified lands being converted to limited area are west of Target 103. This region receives very light use for ORV play; its designation as a limited area would have only a minor impact on casual recreation. The San Felipe Corridor would be posted through this limited area and would assure public access between Plaster City and points north.

Designation of the new limited area west of Target 103 would have a greater impact on organized competitive events. The specific area of concern is between the Carrizo Impact Area and Target 103, bounded on the north by the Gypsum Company railroad crossing of Carrizo Wash, and on the south by the Butterfield Overland Stage Route. In 1984, seven events used this proposed limited area for a significant portion of their course. This zone is currently available for sponsor-option course selection (subject to Navy approval), but under this alternative would be restricted to a system of approved routes. Event sponsors would no longer be allowed to create new courses. However, with the exception of one competitive event course which bisects the Target 103 unclassified area, all major existing routes are recommended for approval, and would continue to be available for competitive use.

The other new limited area designations would have very little impact on competitive events, since in these areas events are already restricted to existing routes, all of which are recommended for approval. That portion of the Plaster City Open Area to be withdrawn to the Navy borders a competitive event course which would continue to be available. All areas in RSZ A and B which are currently authorized for pit locations would remain available, subject to Navy concurrence.

Within the present Plaster City Open Area, casual recreationists would lose some ORV free play and cross-country driving opportunities on the 500 acres being redesignated as limited area, and all vehicular access on the 1,280 acres being withdrawn to the Navy. The affected Plaster City Open Area lands are on the fringe of the open area, adjacent to the current south and west boundaries of Navy Target 103. Although the open area, as a whole, annually attracts 14,000 VUDs of casual recreation, these particular segments are lightly used and contain no specific features of special interest to casual ORV enthusiasts.

Casual recreationists would be denied any type of access within those lands to be withdrawn to the Navy, that is, the RSZ A zones associated with each target and the Parachute Drop Zone. However, two-wheel drive access to the Superstition Mountain area would be preserved by the realignment of Huff and Imler Roads to a location outside of the Target 101 RSZ A. This realignment would assure that camping opportunities associated with ORV use would remain available in the vicinity of the Rockhouse and other locations near the base of Superstition Mountain. The primary adverse impact to be caused by the RSZ A withdrawal would occur in the Parachute Drop Zone. This area currently receives moderate use by ORV recreationists passing through as they travel between Superstition Mountain/Ancient Dry Lake and the Plaster City Open Area. Unless BLM can acquire private land between the two withdrawn areas of Target 103 and the Parachute Drop Zone, there would be no assured direct off-highway access between the two open areas for casual users.

A positive impact which would benefit casual off-road and organized competitive use alike is the redesignation of 1,120 acres of limited area as open area. This acreage along Wheeler Road would assure access to mudhills whose challenging terrain is already popular with ORV enthusiasts. Although about half of the mudhills are within the Target 101 RSZ A and would be unavailable to the public, except during competitive events, the other half would be entirely within the Superstition Mountain Open Area.

The temporary closing of two areas to protect cultural resources would not have a significant effect on off-road vehicle play,, because of their small size. The temporary closure south of Superstition Mountain would result in the loss of some popular campsites, but ample flat space suitable for camping remains available nearby. The two temporary closures would be reopened to public use following mitigation of cultural resources.

Alternative A would not significantly affect other recreational activities such as hunting, rockhounding, nature study, or sightseeing, since all parts of the affected area commonly used for these activities would remain accessible, even where access is restricted to a system of approved routes.

Impacts to Recreation Management: Alternative A would entail an extensive signing program. Twenty miles of boundaries between open and limited areas, two 40 acres temporary closed areas and seven closed routes would require posting. Within the limited areas, approximately 40 miles of primary approved routes (including the San Felipe Corridor) would need posting at intervals with route number markers. Initial installation would require a large expenditure of staff time and materials and would carry with it the continuing commitment for long term maintenance.

Intensive ranger patrol would be required to assure compliance with off-road vehicle restrictions on the newly designated limited area, especially where it borders the high-use Superstition Mountain Open Area. Several situations would create special enforcement problems, such as the Sand Dam being half in an open area and half in a limited area, the mudhills south of Target 101 being partly in an open area and partly in a Naval withdrawal, and the existence of two temporary closed areas completely surrounded by a high-use open area. Rangers currently patrol the Navy Lease, but mainly for general law enforcement and public safety purposes. Considerable additional effort in visitor supervision would be required for Alternative A.

Personnel responsible for competitive event management would experience a sustained increase in workload for the approximately seven events that utilize the west-side limited area. Under present management, these seven events are subjected only to course checks to assure that Target 101 has been avoided and to a post-event compliance check to assure that all litter and course markings have been removed. This alternative would require an additional thorough pre-event compliance check to assure that courses were restricted to approved routes in this area. Checks would also be conducted while events were in progress to confirm that the permittee had established checkpoints at all locations required by the special recreation permit. Although the latter activity would not necessarily be performed for each event, it would be required periodically as a routine spot check, and certainly for any events whose courses made sharp turns near any area of sensitive resources.

Visual Resources

There would be no adverse impacts on visual resources.

In the newly designated limited areas, it is possible that over time, natural processes would obliterate existing hill climbs and other readily visible evidence of ORV play activity, resulting in slightly improved scenic quality in that area.

Minerals

Alternative A would have a resticting effect on all mineral development on both the west and east sides of the study area. This effect would be due to limitations placed on land use by RSZ's, rather than the MUC designation. Through the establishment of withdrawal (RSZ A), right-of-way (RSZ B) and cooperative agreement (RSZ C) areas, mineral exploration and development would be reduced or eliminated altogether, depending on the area and the type of mineral.

Oil and Gas: Oil and gas exploration and development would be limited primarily to RSZ C lands, due to concerns over surface occupancy in the withdrawal and right-of-way areas. Geophysical exploration activities might be allowed without major restrictions within the cooperative areas but usually not within RSZ A. In RSZ B, exploration activities might be allowed on a case by case basis when the Navy was not utilizing the area and when such activities would not violate height or dust limitations.

Actual drilling operations would be restricted to RSZ C areas due to concerns for occupancy within the withdrawal areas and height limitations in RSZ B. Even within RSZ C height restrictions would limit drilling to sites which might be thousands of feet away from the desired drilling point. This type of restriction could eliminate virtually all drilling operations in the study area.

Existing oil and gas leases would still be subject to the conditions under Alternative A even though the leases were issued prior to the initial Navy withdrawal proposal in 1984. The conditions would be placed on any post-lease operation at the time when the Notice of Intent or Application for Permit to Drill (APD) was submitted to BLM. New leases which were issued after this time would contain conditions and stipulations which would reflect the Navy's use of the study area.

The designation of multiple use classes would not have a restrictive effect on oil and gas operations, since all operations would require some level of environmental review regardless of the multiple use class in which the operation was proposed. The multiple use classes would, however, identify those areas which might need a more site specific review due to conflicts with other uses such as recreation in Class I and biological and cultural resources in Class M and L.

Geothermal: Exploration and development of sites with geothermal potential, including the Truckhaven area and a portion of the East Brawley KGRA, could be severely restricted because drilling operations would be limited due to height restrictions. The necessity to move drill sites because of height limitations could make it unfeasible for a lessee to explore and develop his lease.

Multiple use classifications in this alternative would not have a significant effect on geothermal exploration except in MUC I where ORV use could be adversely affected by geothermal operations. All geothermal operations would be subject to environmental review regardless of the MUC designation.

Saleable Minerals: This alternative would restrict the extraction of sand and gravel and other minerals such as clay and rock rip-rap. Extraction would be disallowed within RSZ A and restricted in RSZ B and RSZ C areas by height and dust limitations.

Height limitations could restrict operations at Wheeler Road and other extraction areas. Limitations on the height of processing equipment, as well as on front end loaders and trucks, could prevent material from being extracted. Navy concerns over fugitive dust could restrict development and/or lead to the use of water in the processing operations. The use of water makes processing difficult, so the operator might decide to discontinue operations altogether.

The multiple use class designations would have little effect. Each application for extraction would be reviewed for environmental effects regardless of the multiple use classification. In MUC I areas, however, recreation use might take precedence over material extraction due to safety conflicts between the two uses.

Locatable Minerals: Exploration and development for locatable minerals in the entire study area could be severely restricted or eliminated in certain locations. Mineral entry would not be allowed in RSZ A. Operations would be restricted in proposed RSZ B areas due to height and dust limitations. The same limitations might eliminate exploration in RSZ C if drilling rigs or explosives were required.

Any proposed operation outside RSZ A areas would be reviewed under the 43 CFR 3802 or 3809 regulations and any additional Navy requirements. Since the potential for locatable mineral exploration is low in the study area, these restrictions could effectively prevent exploration in the entire area.

The multiple use class designations for this alternative would have little effect on exploration or development of locatable minerals. In Class L any use of mechanized earth moving equipment would require a plan of operation under the 43 CFR 3809 regulations. In the areas which would be designated Class I or M, an operator would be required to submit a notice to BLM for operations which disturb less than five acres per year and a plan of operations for disturbance of five acres or more per year.

Lands

Land uses in the study area would be affected by changes in multiple use class designation (see Table 2-2) and by restrictions of uses in range safety zones A, B, and C. The uses which are permitted in RSZ A, B, and C are listed in Appendix E.

Table 4-1 evaluates anticipated impacts of Alternative A on several land uses. Also listed are reasons for the evaluations; e.g. height restrictions may limit land uses in all three zones.

Alternative B: No Action

Cultural Resources

There would be no change in MUC designations in the Navy lease area. Negative impacts on cultural resources would continue at the existing rate. They would be similar to those for Alternative A, but more widespread. They would consist of site deterioration and attendant loss of scientific and heritage values (36 CFR 800).

Wildlife

The present situation would continue. Some increase in ORV-related activities would be likely, with associated impacts as discussed under Alternative A. Increased negative impacts would probably be centered in current high use areas (Ancient Dry Lake, Superstition Mountain, Plaster City Open Area) and expand around these focal points. This would have the potential to negatively impact an unknown amount of flat-tailed horned lizard habitat.

TABLE 4-1

Impact of MUC Changes on Land Uses in RSZ A, B, and C, West Side

Land Uses	Anticipated Impact		Impact	Reasons for Evaluations	
	RSZ	RSZ	RSZ		
	A	В	С		
Unc	classif	ied Lea	se Lands	to MUC I	
griculture	N/A	- H	- H	Presently not allowed	
Elect. Generation Facil.	N/A	X	X	None anticipated	
ransmission Facilities	N/A	− H	- M		
istribution Facilities	N/A	L	X		
Communication Sites	N/A	-M	-L	Severe height restrictions	
and Tenure	N/A	0	0	No change	
ransportation R/W's	N/A	L	Х		
<u>Un</u>	classif	ied Lea	se Land	s to MUC L	
griculture	N/A	0	0	No change - not allowed	
Elect. Generation Facil.	N/A	- H	-M	Height restrictions	
ransmission Facilities	N/A	-H	- M	Height restrictions	
Distribution Facilities	N/A	- M	-L	Underground within existing R/V	
Communication Sites	N/A	− H	- M	Height restrictions	
and Tenure	N/A	0	0	No change - not allowed	
ransportation R/W's	N/A	L	Х		
	MUC	M to MU	JC I		
griculture	N/A	L	х	No change	
lect. Generation Facil.	N/A	-L	X	No change	
ransmission Facilities	N/A	- M	-L	Height restriction	
distribution Facilities	N/A	-L	Х	Height restriction	
Communication Sites	N/A	-M	-L	Height restriction	
and Tenure	N/A	X	Х	No disposal allowed in MUC "I"	
ransportation R/W's	N/A	Х	Х	No change	
		MUC I	to MUC	L	
Agriculture	N/A	N/A	- M		
Elect. Generation Facil.	N/A	N/A	-L		
ransmission Facilities	N/A	N/A	-L		
Distribution Facilities	N/A	N/A	-L	Underground existing R/W's	
Communication Sites	N/A	N/A	-M	Height reduction	
and Tenure	N/A	N/A	0	No change	
aste Disposal	N/A	N/A	-L	Not allowed in MUC "L"	
ransportation R/W's	N/A	N/A	-Ł		
	М	UC I to	Unclass	sified	
	_				
griculture	X	N/A	N/A		
lect. Generation Facil.	X	N/A	N/A		
ransmission Facilities	X	N/A	N/A N/A		
Distribution Facilities Communication Sites	X X	N/A N/A	N/A N/A		
and Tenure	X	N/A N/A	N/A N/A		
and Tenure Waste Disposal	X	N/A	N/A		
Pransportation R/W's	-L	N/A	N/A		

^{1/} Degrees of impact are: none (0), low (L), medium (M), high (H), or unknown (X). Positive impacts are preceded by a "+"; negative impacts are preceded by a "-"

It is possible that this alternative would result in the Navy's reapplying for a withdrawal of the entire study area. The associated impacts are discussed under Alternative A (see unclassified lands remaining unclassified, and changes from various MUCs to unclassified). This could have significant negative impacts to habitat for the flat-tailed horned lizard, and could potentially affect management of desert pupfish critical habitat through a lack of patrol and enforcement. Endangered Species Act responsibilities would become the Navy's responsibility.

Vegetation

This alternative would have impacts similar to those described for Alternative A. All known state listed and Federal candidate species would remain unaffected. RSZ A areas and lands currently managed under MUC guidelines would receive approximately the same impacts as they would under Alternative A. The remaining unclassified lands would continue to be affected by recreational activity.

The spillover of ORVs onto West Mesa from adjacent public lands would continue to grow, as would the resulting ORV-related negative impacts. This would produce vegetative change throughout the non-RSZ A Navy Lease, with impacts concentrated in the Superstition Mountain and Ancient Dry Lake areas, Species of significance which would be affected by ORV use include eight populations of pilostyles and five of salton milkvetch.

In the event that the entire area were withdrawn to the Navy, that agency would acquire management responsibility for all of the above vegetation. Impacts would be similar to those described for Alternative A for unclassified lands remaining unclassified.

Wilderness

Implementation of this alternative would not impair the suitability of the Fish Creek Mountains WSA (CDCA-372) for wilderness designation. Although the Navy would not be granted a right-of-way within the WSA, the portion of the WSA covered by the right-of-way (RSZ B) would remain withdrawn to the Bureau of Reclamation and leased by Reclamation to the Navy. In the event of relinquishment of the existing withdrawal by Reclamation, the Navy might apply for a full withdrawal on the WSA lands within RSZ B and C. BIM would accept the application and include a discussion of the WSA issue in the land report to Congress, which would make the ultimate decision on both the withdrawal and wilderness designation.

Recreation

Visitor Opportunities: In the short term, recreation opportunities described in Chapter III would continue to be available. However, the No Action alternative would offer no assurance that existing opportunities on Superstition Mountain or other portions of the Navy Lease lands would continue to be available in the future. The only public recreational activity officially recog-

nized by the Navy would continue to be competitive events. Occasional public safety and recreation use conflicts would continue to occur near Navy target areas and installations, with no coordinated effort by BLM and the Navy to resolve them.

The San Felipe Corridor OHV Project would be implemented on lands under BLM administration, but the right of public access across the Navy Lease portions of the corridor would not be guaranteed. BLM would undertake no projects such as posting of primary access routes which would enhance the value of Navy Lease lands for general public recreation.

In the event of Navy withdrawal of all lands within RSZ A, B, and C, most existing recreational uses would probably continue at least initially. However, the future of recreational opportunities on West Mesa would be strictly tied to the operational requirements of the Navy, which might change in the future. The future status of such projects as the Ocotillo Wells SVRA expansion would be dependent on compatibility with Navy operation and the willingness of the Navy to negotiate a cooperative agreement with the State for use of the lands.

Management Impacts: BLM would retain management responsibility for lands outside the Navy Lease area and for competitive events within the Navy Lease area. Staff requirements and expenditures within the Navy Lease area would be limited to that required for supervision of sponsor-option competitive events and occasional public safety ranger patrols.

In the event of Navy withdrawal of all lands within RSZ A, B, and C, BLM would relinquish all management responsibility for those lands unless otherwise provided for in a cooperative agreement with the Navy. Relinquishment of recreation management responsibility would reduce BLM staff requirements for recreation program administration and ranger patrol. These functions would then become the responsibility of the Navy.

Visual Resources

Implementation of the Alternative B would likely have little or no effect on visual resources.

Minerals

There would be no additional impacts due to mineral exploration and operations unless the Navy reapplied for a withdrawal of the entire study area. The associated impacts of that action are outlined below.

Alternative B would create more site-specific impacts to oil and gas, geothermal, saleable mineral and locatable mineral exploration and development than Alternative A. Impacts to the individual types of minerals would be identical on the east and west sides of the study area, so these are addressed together in the following discussion.

Oil and Gas: Under this alternative, the entire area would be withdrawn for exclusive use by the Navy. All exploration activities such as geophysical and drilling operations would be allowed only under Navy approval. The Navy could deny any proposed operation on either existing leases or new leases.

Geothermal: Same as for oil and gas

Saleable Minerals: All operations would be subject to Navy approval. Existing operations might be required to comply with all Navy requests until expiration of the existing use authorization. All new applications would have to be approved by the Navy prior to issuance of a use authorization. Use of equipment could be restricted by the Navy, and time frames for extraction could be specified in order to prevent conflicts with Navy operations.

Locatable Minerals: If the entire area were withdrawn by the Navy, it is assumed that the subject land would be withdrawn from mineral entry and location; this would prevent any locatable mineral exploration or development. The existing claims in the subject area would probably be physically examined for a valid discovery of valuable minerals. If no discovery were found, the claims could be declared null and void through administrative legal proceedings.

Lands

Since management would continue under the guidelines of the approved CDCA Plan, which has been in place since 1980, no impacts are anticipated. However, if the Navy withdrawal for the total area were approved, approximately 318,00 acres would be removed from multiple-use management.

Alternative C: Maximum Use

Cultural Resources

There would be no restrictions on vehicular travel within the southern half of the study area. The entire region would become an open area since the Navy would have difficulty enforcing their withdrawal borders. Adverse impacts to cultural resources would be similar to those for Alternative B. Archaeological sites within the proposed withdrawal area would also be threatened by impact from ORV traffic violating the closure. Neither these sites nor Native American values throughout the region would receive administrative protection.

Wildlife

This alternative calls for the classification of 27,780 acres of currently unclassified land as Class I instead of Class L as recommended in Alternative A. This would expand the Class I impacts outlined under Alternative A to an additional 7,520 acres of wildlife habitat. Of primary concern would be impacts to an additional 1,360 acres of high density, 896 acres of medium density, 1,120 acres of low density, and 12,064 acres of potential optimal flat-tailed horned lizard habitat. Impacts to this species would be significant; combined with the reduction in lizard relative abundance in Yuha and East Mesa critical habitat areas, the possibility of overall reductions in habitat on public land is considerable.

All other impacts would be as outlined under Alternative A, without any significant offset of additional negative impacts (resulting from Class I designation) by acreage equal to that of Alternative A being designated Class L. Endangered Species Act responsibilities on classified lands would remain with BIM.

Vegetation

Alternative C would have nearly the same adverse impacts on vegetation as would Alternative A. In addition, 20,480 acres of creosote bush scrub land containing one population of Thurber's pilostyles would be designated MUC I instead MUC L, as in Alternative A. This land would be exposed to the impacts from random ORV use described for newly designated MUC I land in Alternative A. Endangered Species Act responsibilities would remain with the BLM on classified land.

Wilderness

Impacts would be identical to those for Alternative A.

The existence of a Class I Open Area immediately adjacent to the Fish Creek Mountains WSA is not expected to cause a management problem, because the boundary conforms to a natural break in the topography which precludes vehicular access into the WSA. Public access is currently unrestricted in this proposed Class I area, and the WSA has not been subject to vehicular trespass.

Recreation

Visitor Opportunities: Alternative C would allow continued unrestricted organized and casual ORV recreation in all areas where opportunities currently exist. The new open area would total 49,380 acres, or 20,480 more than in Alternative A. All of the important ORV play sites would be included in the open area, including the Sand Dam and the north slope of Superstition Mountain, and that portion of the mud hills outside the Target 101 unclassified area. These important sites are partially or totally excluded from the Open Area under Alternative A. Alternative C would also provide two public access corridors through the Parachute Drop Zone, thereby assuring direct links between the Superstition Mountain and Plaster City Open Areas. In contrast, Alternative A would provide north-south access via the corridor between Target 103 and the Parachute Drop Zone, but that access would be indirect, would cross private property, and would not follow routes currently in use. The two public access corridors through the Parachute Drop Zone in Alternative C would follow existing use corridors.

Alternative C would place no new constraints on competitive events. All areas currently available for sponsor option course selection would remain available as would all current pit locations.

Other recreational activities such as camping, hunting, rockhounding, and nature study would be unaffected.

Management Impacts: Alternative C is the least labor-intensive of all the alternatives except No Action. The signing program would be less costly than that of Alternative A, since there would be only eight miles of limited/open area boundaries to post, no closed areas, and only two closed routes. The San Felipe Corridor and the parachute drop zone corridors would be the only approved routes posted with identifying markers, for a length of approximately 29 miles. Although Alternative C would require posting of about five miles of access corridor in the Parachute Drop Zone, this additional task would be more than offset by the signing projects that would be eliminated.

Similarly, Alternative C would require less intensive ranger patrol than Alternative A. Although the parachute drop zone corridors would have to be patrolled, these corridors would follow existing routes and provide direct access. It is likely that these routes would be used illegally under Alternative A. Legitimizing them under Alternative C would reduce the enforcement burden and improve safety by directing the public away from the drop targets. Management of the boundaries between open and limited areas would be much easier. The open area boundary near Superstition Mountain would be well away from the current zones of high use, whereas in Alternative A these zones would be adjacent to or bisected by the open/limited area boundary. Reduced enforcement needs along open/limited boundaries and within limited areas would permit greater emphasis on patrolling the boundaries of RSZ A to prevent public entry into the areas of greatest safety hazard.

Alternative C would not require increased responsibilities in competitive event management, since sponsor-option racing within the Navy Lease area would continue.

Visual Resources

Alternative C would not involve any Visual Resource Management Class changes.

It is not anticipated that scenic quality would deteriorate with the increased open area designation, since the open area is an affirmation of existing use patterns. The area is already heavily impacted from over 20 years of ORV use.

Minerals

In terms of mineral exploration and development, alternative C is almost identical to Alternative A. The modifications of the MUC designations to allow more recreational use would have little or no effect on the restrictions placed on mineral operations as described for Alternative A. For all mineral categories, the increase in recreational use might create some conflicts with proposed mineral operations, but these conflicts would not be significant.

Lands

Same as Alternative A.

Alternative D - Minimum Use

Cultural Resources

This alternative would provide the greatest degree of administrative protection to cultural resource values. The MUC I area would be limited to the area surrounding the ancient Dry Lake and the south side of Superstition Mountain. One cluster of the sensitive archaeological sites around the ancient Dry Lake would be protected by temporary closure, which would be rescinded once the sites had been subjected to data recovery.

Alternative D would increase the amount of land within the MUC L designation and would limit vehicle use to approved routes of travel, possibly resulting in a net positive impact to archaeological values. The utility of this multiple-use class in protecting resources would depend upon the public's willingness to comply with travel restrictions and BLM enforcement.

The MUC L area south of Superstition Mountain would also contain a temporary closure to protect archaeological and Native American values which have been impacted from vehicle use and camping activities. The closure would be lifted once these resources had been permanently protected or subject to mitigative field work. Additional archaeological values are recorded outside this closure. The continued existence of these resources would be contingent upon route of travel compliance by the recreation community.

Wildlife

This alternative would call for the designation of an additional 20,570 acres of unclassified land as MUC L, rather than MUC I, as in Alternative A.

The unclassified areas being designated as MUC L by Alternative A are currently receiving little ORV use. Therefore, the more restrictive MUC L designation would result in only minor positive impacts under Alternative A. The additional unclassified areas proposed for MUC L by Alternative D, however, are currently receiving ORV use of both casual and competitive types. Positive impacts should occur through the limiting of ORV use to approved routes of travel, the designation of an approved race course system, and the case by case review of enduro routes. If these limitations were effectively enforced, even the current level of negative impacts would be significantly reduced. This would have highly positive effects on wildlife and habitat including 7,100 additional acres of high density, 3,840 additional acres of medium density, 1,660 additional acres of low density, and 4,800 additional acres of potential optimal flat-tailed horned lizard habitat.

Endangered Species Act compliance would remain a BLM responsibility on all classified lands.

Vegetation

Impacts under this alternative would be the same as those described for Alternative A for most areas. The exceptions would be those unclassified lands that are changing to MUC L under this alternative but would have been designated MUC I by Alternative A. These parcels will not be as negatively impacted as they would under Alternative A.

The 20,570 acres of MUC L land that would have been categorized as MUC I under Alternative A would receive increased protection against ORV spillover. Limiting vehicles to designated routes would protect vegetation and prevent establishment of new trails. Along old trails perennial species that are badly damaged by cruising would be given an opportunity to recover. Competitive event courses in this area would be inspected before approval of routes, reducing the chance of damaging significant vegetation. The negative effects of both random ORV use (described in Alternative A) and of uninspected competitive event courses would be limited to 8,000 acres of MUC I.

Species of special significance would benefit substantially from additional MUC L designation. Eleven populations of Thurber's pilostyles would be managed as unclassified, two as MUC M, eight as MUC L, and none as MUC I. The hills east of the Ancient Dry Lake are home to 241 known pilostyles, the southern representative of a cluster of stands extending into Target Area 101. This may represent a greater quantity of this species than is contained in the rest of California outside of the West Mesa. Preventing vehicle impacts to these populations would be a major step toward ensuring the continued existence of this plant in California.

The one population of salton milkvetch placed in MUC I would face eventual extirpation due to the popularity of its location with ORV users.

Wilderness

Impacts would be identical to those of Alternative A.

Recreation

<u>Visitor Opportunities</u>: Like Alternative A, Alternative D recognizes the significance of Superstition Mountain to ORV recreationists by incorporating a portion of it into an open area. However, the new open area established under Alternative D would be only 8,330 acres or 20,570 acres less that the one in Alternative A.

As described for Alternative A, casual recreationists would lose the cross-country driving and play riding opportunities on the lands proposed for conversion to limited access from either open status or unclassified status, and all vehicular access on the lands being withdrawn to the Navy. Alternative D would convert 61,020 acres or 19,780 more acres than Alternative A, to limited area status. This additional acreage is currently unclassified Navy Lease land.

Most of the additional limited area acreage (about 80 percent) would be in the relatively flat central portion of the area between Superstition Mountain and the U.S. Gypsum Company railroad. This location lacks challenging terrain, and, with the exception of the area immediately adjacent to the mountain's south slope, currently receives relatively low use for ORV free play or cross-country touring. However, the other 20 percent of the additional limited area would be comprised of the mudhills north of Wheeler Road. This popular playriding area is used by recreationists based at both Superstition Mountain and Ancient Dry Lake. The mudhills area is also frequently included in competitive event courses. There is no mudhills-type terrain within the Navy

Lease area proposed for open area designation under this alternative. Although the northwest portion of the Plaster City Open Area contains similar landforms, it is 15 miles from Ancient Dry Lake by the shortest (off-highway) route.

Compared to Alternative A, Alternative D would place additional constraints on competitive events. The most significant change would be the designation of the mudhills south of Target 101 and most of the flats south of Superstition Mountain as limited area. This would virtually eliminate sponsor-option competitive events in the Superstition Mountain area, since races would be restricted to a designated course system within the limited area. tion, Alternative D would employ a designated course system within the Parachute Drop Zone, which would remain a sponsor-option area (with Navy concurrence) under Alternative A. Alternative D would make a special exception for enduros and other events where standings are determined by something other than fastest speed. These types of events would be permitted on all approved routes within the limited area, subject to BLM review on a case-by-case basis. Enduros would be restricted to the competitive event course system only within the Parachute Drop Zone. In 1984, 17 competitive events used the Parachute Drop Zone and/or the Alternative D proposed limited area for either all or a significant portion of the course. Three of these events were enduros or poker runs; 14 were races. Alternative D would eliminate competitive event pitting within the Parachute Drop Zone as well as the limited area. In 1984, three events pitted in these areas. An important pit site which would be lost in the Parachute Drop Zone is an area near the "Whirl Tower" on Payne Road.

The impact of Alternative D on other recreational activities such as hunting, camping, rockhounding, and nature study would be similar to that of Alternative A.

Management Impacts: Alternative D would produce the greatest workload in visitor management and enforcement. Compared with the other alternatives, it would entail the highest cost in both time and materials.

An intensive inventory would have to be conducted of all vehicle routes in the Alternative D limited areas. In view of the large number of routes blanketing these areas, this inventory would be a significant task. Route approvals would be undertaken through the standard California Desert District Route Approval Process. This additional inventory and route approval procedure would not be required under Alternative A.

Both Alternative D and Alternative A would require extensive signing to delineate approximately 20 miles of the boundaries between open and limited areas. However, Alternative D would incorporate additional regulatory and informational signing not found in Alternative A. Closed routes and 70 miles of major open routes would be posted, the latter with route number markers at intervals. Approved competitive event courses would require signing within the limited area as well as in the Parachute Drop Zone. The major impact of this additional signing would be the cost in time and materials for its initial installation, but maintenance and replacement costs would also exceed those of Alternative A over the long term.

Alternative D would require more intensive Ranger patrol than Alternative A because it establishes 19,780 more acres of limited area, including some

historically popular sites for ORV free play (i.e., the mudhills and the area abutting the south slope of Superstition Mountain). This alternative contains the special enforcement problems described under Alternative A, with one significant addition - the high use Superstition Mountain Open Area would be virtually surrounded by limited area.

Personnel responsible for competitive event management would experience a greater increase in workload, since intensive compliance checks would be required on approximately 17 events per year, or 10 more than under Alternative A.

Visual Resources

Impacts would be similar to those of Alternative A.

Minerals

The effect of alternative D on mineral exploration and development for all mineral categories would be virtually identical to that of alternative A.

Under this alternative more site specific environmental reviews would be required for all proposed mineral operations whether they were for oil and gas, geothermal, mineral material or locatable minerals. Additional mitigations to reduce environmental impacts of geophysical operations, drilling, and/or extraction operations, might by required which were not required under Alternatives A or C.

Lands

Same as Alternative A.

AMENDMENT ONE

NAVY COOPERATIVE AGREEMENT - EAST SIDE

Alternative A: Proposed Action

Cultural Resources

Adverse impacts would be considerably less than those anticipated for the west side. Archaeological values are relatively low (Gallegos, 1980). Prehistoric sites occur in low frequencies outside the Lake Cahuilla shoreline, which crosses only a portion of the study area. Portions of ACEC 66 are located within the withdrawal area. This ACEC has never been formally inventoried.

Military activity constitutes the greatest impact to those cultural resources present on East Mesa. Potential disturbances for withdrawal areas are similar to those described for West Mesa, although search traffic is less and there are no remote-controlled vehicles employed on the east side. New targets and service facilities may be erected with extreme surface disturbance and potential loss of resources.

Recreation impacts to cultural values are currently low. This is because the vast majority of ORV activity is concentrated in the Class I area of Imperial Sand Dunes, rather than in East Mesa.

Archaeological values within portions of ACEC 66 may be damanged by military activities. Resources within the ACEC have been only partly inventoried and those sites are located around a marsh environment situated within the proposed withdrawal. These sites could be destroyed if the Navy chose to fully develop its entire area.

The withdrawal of ACEC 66 for military purposes may be inconsistent with the Desert Plan. The goal of an ACEC designation is to identify, protect, and monitor significant cultural resources located on public land (USDI, BIM 1980). This goal assumes that BIM management would be available to implement individual activity plans.

In the case of ACEC 66, compatibility with the Desert Plan hinges on the presence or absence of cultural resources within the Navy withdrawal. If there are no archaeological values there, then no conflict would arise from implementing the withdrawal. If archaeological sites are present, allowing those resources to leave the protective management of BIM would be inconsistent with specific Desert Plan goals. Current evidence suggests that the probability of the presence of archaeological values is remote.

Positive impacts would accrue to cultural resources as a result of Alternative A. Portions of the study area would be closed to ORV activity. On other portions of East Mesa, route closures would continue. Both actions would prohibit surface disturbances and protect archaeological values.

Wildlife

ORV-related impacts have already been outlined in discussions of casual use, camping, and noise under the West Side section. Naval activities would be the same as outlined in the West Side discussion, except that parachute dropping of heavy equipment and use of remote-controlled moving targets is not currently occuring. A discussion of specific impacts related to land class changes is presented below.

MUC L to Unclassified: Impacts would be somewhat negative. Under current BLM management, there are no approved routes of travel in the study area, and BLM rangers enforce this limitation. Although public access would also be prohibited under Navy management, the amount of enforcement might be less than under BLM. Spillover might occur from adjacent BLM land.

If the level and kind of current Navy activities remain the same, no additional impacts would occur. However, if these activities increased, impacts could become more widespread. In the worst case, wildlife values could be lost. Although no sign of the flat-tailed horned lizard has been observed in approximately 1,500 acres of the area which has been surveyed, virtually all of the rest of the area has been identified as potential optimal habitat.

MUC M to Unclassified: Impacts would be similar to the above. The area contains 640 acres of high density, 640 acres of medium density, 880 acres of low density, and 3,200 acres of potential optimal flat-tailed horned lizard habitat. In addition, there is a cattail marsh included in the area.

MUC M to MUC L: Wildlife would benefit from the elimination of ORV use. The degree of benefit would be proportional to the effectiveness of enforcement. This area contains about 640 acres of medium density, 1,250 acres of low density, and 3,580 acres of potential optimal flat-tailed horned lizard habitat.

MUC C, L, M, and I, Remaining Unchanged: Newly restricted ORV use on other lands in the project area would result in increased ORV use and impacts in these areas, even though their MUCs would not change.

Vegetation

Parts of the East Mesa not undergoing MUC changes would be entirely unaffected by Alternative A. This is also true of areas undergoing MUC change from M to L. The unclassified parcels would consist of creosote bush scrub with minor inclusions (5 percent) of mesquite dunes, desert psammophytic vegetation, and a riparian area. The level of impacts to the vegetation on these lands is unknown; they could range from no impact to total removal of perennials, depending on the level of naval activity. Potential impacts resulting from Navy operations would be assessed and mitigated by the Navy.

All state-listed, Federal candidate, and CNPS-listed plants in the study area would be retained under their current management. MUC changes and Navy operations should not effect any significant species. Retention of 36,700 acres under MUC I as mandated by the Desert Plan (USDI 1980) would, however, threaten the existance of large numbers of Peirson's milkvetch, desert sunflower, giant Spanish needle, Wiggin's croton, and sandfood. Three of these plants are Federal candidate species, and three are state listed (see Chapter III). Plants would suffer from soil disturbance and could be crushed by uncontrolled ORV use.

Wilderness

Implementation of the Alternative A would not impair the suitability of the North Algodones Dunes WSA (CDCA-360). The proposed Cooperative Agreement is consistent with both the IMP and WMP. WSA 360 is not affected by any of the proposed withdrawals or rights-of-way.

Recreation

<u>Visitor Opportunities</u>: The proposed action would have a negligible impact on recreation opportunities on lands east of the old Coachella Canal or north of Highway 78 on the East Mesa. The lands east of the canal in the Imperial Sand Dunes Recreation Area would remain under BLM management, and all recreation facilities such as Gecko Campground would remain open and available for use.

Public access north of Highway 78 on East Mesa is already limited to approved routes along Highway 78, the Coachella and East Highline Canals, and along Titsworth Road. The proposed withdrawal and right-of-way around Target 95 would have no effect on these existing approved routes.

The major impact of Alternative A would be on recreation opportunities within the new MUC L area around Target 68. This area would be closed to motorized vehicle use. This change would displace approximately 9,000 VUDs of camping and off-road vehicle use to other areas. The most significant impact would be to campers who currently use the area immediately south of Highway 78 and west of the old Coachella Canal as an overflow camping area associated with the Imperial Sand Dunes. These users would have to move to the east side of the canal or somewhere else within the sand dunes area. This might result in some additional crowding within the Imperial Sand Dunes Recreation Area, although the 9,000 VUDs could be accommodated within the space available.

Management Impacts: Alternative A would have a negligible impact on recreation management east of the old Coachella Canal or north of Highway 78 on East Mesa.

However, the enlarged closed area around Target 68 would require installation of approximately 80 boundary signs. The area is already frequently patrolled by BLM rangers, and it is not anticipated that a significant increase in patrol time would be required to enforce the closure after an extra initial effort during the first user season. Overall, the closed area would require less management and enforcement effort than would a limited area (see specific impacts for Alternative C for a comparison).

Visual Resources

Implementation of Alternative A would have no significant impact on visual resources.

Minerals

In general, impacts would be the same as described for Alternative A on the West Side study area. However, exploration of sites with geothermal potential, including a portion of the East Brawley KGRA, could be severely restricted because drilling operations would be limited due to height restrictions. The necessity to move drill sites because of height limitations could make it unfeasible for a lessee to explore and develop his lease.

Lands

Land uses in the study area would be affected by changes in MUC designation and by restrictions on uses in range safety zones A, B, and C. The uses which are permitted in RSZ A, B, and C and restrictions for these zones are outlined in Appendix E.

Table 4-2 evaluates anticipated impacts of Navy operations on several land uses within the MUC designations of Alternative A.

TABLE 4-2
Impact of MUC Changes on Land Uses in RSZ A, B, and C, East Side

Land Uses	Anticip RSZ	ated In	RSZ	Reasons for Evaluations
	A	В	C	
	MUC "L"	to Unc	lassified	
Agriculture	0	N/A	N/A	No change
Elect. Generation Facil.	-L	N/A	N/A	no charge
Transmission Facilities	-H	N/A	N/A	
Distribution Facilities	-H	N/A	N/A	
Communication Sites	-L	N/A	N/A	
Land Tenure	0	N/A	N/A	No change
Transportation R/W's	X	N/A	N/A	110 (114119)
	MUC M	to Uncl	assified	
Agriculture	0	N/A	N/A	No change
Elect. Generation Facil.	- L	N/A	N/A	
Transmission Facilities	- H	N/A	N/A	
Distribution Facilities	-H	N/A	N/A	
Communication Sites	-L	N/A	N/A	
Land Tenure	0	N/A	N/A	No change
Transportation R/W's	X	N/A	N/A	
	MUC	Mto	IUC L	
Agriculture	N/A	0	N/A	No change
Elect. Generation Facil.	N/A	X	N/A	
Transmission Facilities	N/A	- H	N/A	Height restriction
Distribution Facilities	N/A	-L	N/A	
Communication Sites	N/A	X	N/A	
Land Tenure	N/A	0	N/A	No change
Transportation R/W's	N/A	X	N/A	

Degrees of impact are: none (0), low (L), medium (M), high (H) or unknown (X). Positive impacts are preceded by a plus (+) and negative impacts by a minus (-).

Alternative B: No Action

Cultural Resources

The no action alternative would permit current levels of public use to continue or increase. This would result in continued deterioration of those archaeological resources on East Mesa. Potential impacts from military actions would diminish, since the current size of the withdrawal would be maintained. ACEC 66 would be retained by BLM, although management would not be as effective as for Alternative A because of the Class M designation (Appendix G).

Wildlife

The present situation would continue. Some increase in ORV-related activities would be likely, with associated negative impacts as discussed for Alternative A on the west side. Increased use would probably be concentrated in current Class I areas and would expand around these focal points.

It is possible that this alternative would result in the Navy's reapplying for a withdrawal of the entire study area. The associated types of impacts are outlined in the discussion of Alternative A impacts for the West Side. A total withdrawal could impact primarily medium and low density flat-tailed horned lizard habitat, and could also affect habitat for the Federal candidates Andrew's dune scarab beetle and desert tortoise. Important burro mule deer habitat and windmill water sources would also be lost.

Endangered Species Act compliance would become a Navy responsibility on any lands withdrawn to the Navy in the future.

Vegetation

Impacts would be similar to those described for the Alternative A. The exception is that the unclassified lands under Navy lease would contain less than 2,300 acres of creosote bush scrub. A much smaller acreage of vegetation would therefore be exposed to disturbance from Navy operations.

If this entire area were eventually withdrawn to the Navy for military use, all vegetation could be subjected to impacts from construction and bombing. This would include the six rare plants in the Imperial Dunes (see Chapter 3). Responsibility for managing this vegetation would be transferred to the Navy.

Wilderness

Implementation of this alternative would not impair the suitability of the North Algodones Dunes WSA (CDCA-360) for wilderness designation. In the event of application by the Navy for full withdrawal of lands in RSZ C, BLM would have to accept the application and include a discussion of the WSA issue in the land report to Congress. Congress would then make the ultimate decision on the withdrawal and wilderness designation.

Recreation

Visitor Opportunities: Recreation opportunities described in Chapter 3 would continue to be available, at least in the short term. A possible withdrawal by the Navy of all lands in RSZ A, B, and C could have a major impact on recreation, especially in the Imperial Sand Dunes Recreation Area. While existing recreational uses of the sand dunes would most likely be permitted to continue under a Navy withdrawal, the continued availability of the lands for recreation would be tied to future Navy operational requirements.

Management Impacts: This alternative would have no impact on existing management unless the Navy made application for withdrawal of all lands in RSZ A, B, and C. Such a withdrawal would result in relinquishment of BIM management responsibility for large portions of East Mesa and the Imperial Sand Dunes Recreation Area, including the Cahuilla Ranger Station and Gecko Campground. Unless a cooperative management agreement were adopted for the withdrawn lands, the withdrawal would have a profound impact on BIM's management program for the sand dunes. Transfer of management responsibility for the most highly developed portion of the sand dunes from BIM to the Navy would reduce BIM staffing needs for patrol, maintenance, and administration of the facilities, but would hamper efforts toward coordinated management of the entire sand dune system. BIM would retain responsibility for the heavily used Glamis and Buttercup Valley areas, but would lose its base of operations at Cahuilla Ranger Station.

Visual Resources

Implementation of this alternative would probably have no adverse or positive impacts on visual resources.

Minerals

Impacts would be the same as described for the West Side Study area.

Lands

Since this alternative would continue management under the guidelines of the CDCA Plan, which has been in place since 1980, no impacts are anticipated. However, if the Navy withdrawal for the total area (i.e., RSZ A, B and C) were approved, this would remove 100,200 acres from multiple-use consideration.

Alternative C: Maximum Use

Cultural Resources

Navy use and development would have impacts similar to those described for Alternative B, even though the Navy withdrawal would be the same as for Alter-

native A. Archaeological resources within ACEC 66 surrounding the marsh would be managed by the Navy and not the BLM. This alternative would provide only limited control of ORV activity which could adversely affect cultural resources.

Wildlife

Impacts would be as described for the Alternative A in the sections on MUC L and M to Unclassified and MUCs Remaining Unchanged. Since no MUC M lands would be designated as MUC L, associated benefits would not occur.

Vegetation

Impacts would be identical to those for the Alternative A.

Wilderness

Impacts would be identical to those for Alternative A.

Recreation

<u>Visitor Opportunities</u>: Impacts north of Highway 78 and east of the old <u>Coachella Canal would</u> be negligible. South of Highway 78 in the RSZ B around Target 68, existing recreational opportunities would be retained. Closure of lands within RSZ A would have a negligible impact on overall opportunities, since very few currently used routes are located within this area.

Approval of the existing routes shown on Map 10 in the Target 68 RSZ B area would provide for existing camping opportunities. This alternative would not, however, legitimize the extensive amount of off-road play activity currently taking place in this area. As is the case with all Limited Areas, cross-country travel would be prohibited.

Management Impacts: This alternative would approve a number of existing routes around Target 68 which have not been previously approved for use. Enforcement of Limited Area restrictions concerning free play and cross country travel would require increased ranger patrol in the area. It might be necessary to post all approved routes in order to make them readily identifiable and to make limited use restrictions more enforceable.

The closure at the boundary of RSZ A would be more difficult to enforce than the closure boundary under Alternative A. It would not follow existing identifiable features. Throughout most of its length, the RSZ A boundary would be located some distance from approved routes. It would be difficult for BLM Rangers to detect persons who illegally drive or ride cross-country to enter the closed area.

Recreation management impacts in other portions of East Mesa would be identical to those of Alternative A.

Visual Resources

This alternative would have no adverse or positive impacts on visual resources.

Minerals

Impacts would be the same as described for Alternative A.

Lands

Impacts would be the same as for Alternative A.

Alternative D - Minimum Use

Cultural resource impacts would be similar to those of Alternative A. However, in this alternative a portion of ACEC 66 would be excluded from the withdrawal. This would permit continued management of the archaeological values in that portion by BLM according to the recommendations of the final ACEC management plan (Welch, 1984b).

Additional resources may exist within that portion of the ACEC still located inside the withdrawal area. If present, these resources might be subject to negative impacts from Navy operations. This alternative would also result in positive impacts which are described in Alternative A.

Wildlife

Impacts would be the same as under Alternative A, except that the cattail marsh would remain under BLM jurisdiction (MUC L). This would benefit wildlife in the marsh area.

Vegetation

Impacts would be identical to those from Alternative A, with one exception. A 160 acre parcel containing a small marsh would be managed as MUC L rather than as a withdrawal. Although no rare plants are found here, this riparian community is unique in this area. Managing it through MUC L would reduce its chances of being damaged by Navy operations.

Wilderness

Impacts would be identical to those of Alternative A.

Recreation

Impacts would be identical to those of Alternative A.

Visual Resources

Impacts would be negligible, as in the case of Alternative A.

G.E.M.

Impacts would be the same as described for Alternative A.

Lands

Impacts would be the same as for Alternative A.

AMENDMENT TWO
MUC GUIDELINES ON AGRICULTURE

Alternative A: Accept amendment

Acceptance of the amendment would have no effect. Applications for agricultural development through exchange or Desert Land Entry (DLE) would continue to be accepted in unclassified areas, as they are currently.

At the last time the CDCA Plan was formulated and at the present time, the Classification and Multiple Use (C & MU) designations prohibited, or segregated, CDCA lands (and other BLM-administered lands) from acquisition through Desert Land Entry (DLE) (Act of March 3, 1877) for agricultural purposes. The present amendment would formalize the intent of the segregation of CDCA land by incorporating it into the MUC guidelines of the CDCA Plan, and prohibit agricultural entry once the C&MU designations are lifted.

Alternative B: Reject amendment (no action)

Rejection of the amendment would have no effect on the physical environment. However, it would result in considerable unecessary, wasteful effort on the part of Bureau employees in processing and denying applications for agricultural entry in areas of the CDCA where that use is clearly inappropriate. Such an effort, which would involve environmental assessment of areas under application, as well as other administrative procedures, would expend the tax payer's money needlessly. In addition, members of the public applying for agricultural entry would receive no guidance in the choice of compatible areas for farming.

AMENDMENT THREE

CHANGE MULTIPLE USE GUIDELINES ON COMMUNICATION SITES

Alternative A: Accept amendment

Adoption of the amendment would recognize the desire of the public to be informed and to provide their opinions about major actions, including the

addition of long distance telecommunications systems across the California Desert. It would be consistent with the Desert District's policy in San Bernardino County, which is to coordinate with the County and with other land management agencies (U.S. Forest Service, State of California) in reviewing each telecommunication system of three or more sites. A single environmental document would cover the entire system; it would fulfill the Federal and State requirements for environmental review, including the State requirement for a 30-day public review. Thus, the opportunity would be provided for interested organizations, individuals, and governmental agencies to present their comments.

It is unlikely that the 30-day period would inconvenience the proponent of the new system, since it will, in the long run, be beneficial to have the entire system considered as a unit and bring out possible conflicts before starting construction at any single site.

Alternative B: Reject amendment (no action)

Rejecting the amendment would allow present procedures to continue. Currently, public comment on environmental assessments is called for only in cases which the BLM staff interprets as controversial. Although the staff is usually aware of public feelings about management of specific locations, it is probable that occasional projects might elicit more concern than would be expected. It is for such occasions that this 30-day review period would be initiated.

It should be noted that prior to AT&T's breakup and the rush to install trans-desert microwave systems, single communication sites were minor actions with little or no environmental effect which could not be mitigated. Now they are more likely to be part of a trans-desert system.

AMENDMENT FOUR
MUC GUIDELINES ON WASTE DISPOSAL

Alternative A: Accept amendment

This alternative would prohibit the establishment of waste disposal sites (either hazardous or nonhazardous) on BIM lands in the CDCA. Waste disposal sites would continue to be available to local governments through the direct purchase of public lands within MUC M and unclassified lands. There would be no environmental effects of accepting the amendment.

Alternative B: Reject amendment (no action)

The Bureau would continue to be responsible for ensuring long term compliance with all environmental laws concerning any land fills on public lands whether or not the site was patented or leased pursuant to the R&PP Act. The economic liability of rejecting the amendment is not known but could be substantial in the event that extensive cleanups of one or more of these sites became necessary.

Alternative A: Accept amendment

Adoption of the amendment would correct the current wording of the MUC Guidelines which state: "New gas, electric, and water transmission and trans-desert telecommunication facilities may be allowed only within designated corridors." This wording could lead to confusion, since it actually applies to coaxial cables for interstate communications (CDCA Plan, Energy Production and Utility Corridors Element, p. 115) and not to trans-desert line-of-sight microwave tower systems which have become more common since the divestiture of AT&T in 1980.

Alternative B: Reject amendment (no action)

Rejection of the amendment would let stand some possibly confusing wording in the MUC Guidelines which disagrees with the intent of the Energy and Utility Element as expressed on p. 115 of the Plan.

AMENDMENT SIX
RESTATEMENT OF GOALS FOR PLAN ELEMENTS

Alternative A: Accept amendment

The revised goal statements of the CDCA Plan Elements would provide better management direction for all affected resource programs by establishing goals which would be clearly achievable and whose progress would be measurable. In addition, they would be more consistent with current Bureau policy and with other plan elements; they would be more clearly written and understandable; and they would be less redundant with other element goals.

Alternative B: Reject amendment (no action)

Existing goal statements would be retained, although the recent evaluation showed the need to eliminate redundancy and vagueness and to provide more measurable goals.

AMENDMENT SEVEN REVISE MULTIPLE USE CLASSES IN BAKER AREA

Alternative A: Part a) Change 419 acres of land south of I-15 at Baker from Class M to unclassified. Part b) Adjust the boundary of the East Mojave National Scenic Area to coincide with the south and east sides the amendment boundary.

Social

Adjusting the unclassified area south of Baker would remove some of the restrictions on growth in the community. Presently, land availability is a major hindrance to growth and development in Baker. Although the additional unclassified area amounts to only 419 acres, it represents a substantial increase relative to the community size. Ultimately, acceptance of this alternative could mean population growth and additional employment opportunities.

Minerals

Acceptance of this alternative would have little or no effect on minerals. A change from Class M to unclassified would have no impact on known locatable or saleable minerals. They would be affected only if the lands were conveyed from public ownership. The subject area is prospectively valuable for oil and gas and sodium and potassium. A sale of the surface estates would require either an appraisal of the leasable mineral estate to determine its value or a decision that the valuable leasable minerals should be retained in Federal ownership.

Burros

There would be a very small reduction of the acreage included in the Lava Beds Herd Management Area if and when the unclassified lands were sold. The effect on the burros or their management would be negligible.

Lands

The EMNSA boundary change would delete approximately 1700 acres (1071 acres private and 629 acres public) from the 1.4 million acre EMNSA. This area is currently undeveloped, with the exception of one residence and some sewage ponds. The BLM lands contain no significant or special resources that add to the Scenic Area's value, but are situated at one of its key entry points. The change in the EMNSA boundary is consistent with the Desert Plan and the management philosophy of the EMNSA which recognizes the need for land sales in the Baker area.

Deletion of this area from the Scenic Area would foreclose the option of acquiring the private lands for incorporation in the Scenic Area. It is possible that improvements in this area could reduce pressure for development within the EMNSA. If sold, the lands would still be subject to planning requirements of San Bernardino County, and the California Environmental Quality Act would apply. These would provide the Bureau and the public a mechanism for commenting on the development of the private lands.

Visual Resources

The visual resources affected by this amendment are limited to the foreground view. Many people view the area for a very short period of time due to the proximity of the public lands to I-15. From I-15 visitors can see an existing quarry, a private residence, and a telephone service road. In addition, a right-of-way exists for the construction of a local access road parallel to the Interstate. From local vehicle routes, visitors traveling at slower speeds can see the intrusions mentioned above. They can also see trash that has been deposited over the years and past disturbances of the public lands. Developments may impair the view from I-15 looking east and south from Baker. However, it is likely that new developments in this already impacted site would be less intrusive than they would in other more pristine areas within the EMNSA.

The sale and eventual development of the public lands in question would damage the visual resources as they appear today, but this reduction in quality would be minor for two reasons. First, the majority of visitors would be viewing the foreground for a very short period of time, and unobstructed views of the background will remain from either side of Baker. Secondly, the cumulative deterioration of the visual resources from development would be no greater than if the existing private lands were developed today. BLM would still be able to work cooperatively with San Bernardino County to ensure that any developments would follow generally accepted visual management practices.

Alternative B: Change to Class L the unclassified and Class M land within the amendment boundary and south of I-15. Leave the EMNSA boundary at I-15.

Social

Acceptance of this alternative would remove from potential sale all public lands within the amendment area, south of I-15. It would limit the expansion and development of the community of Baker to only the north side of I-15. This would leave approximately 1,152 acres of unclassified lands north of I-15, only 192 of which are unencumbered (see Alternative D). Development in the Baker area beyond the projected unclassified boundary would be limited temporarily by the presence of Wilderness Study Areas 242 and 228. However, it is highly likely that Congress would make its decision on these non-recommended WSAs long before this land is needed for urban uses. Commercial development would not be affected to the north of I-15, along the main thoroughfare through Baker. Public lands there would still be available for sale.

Visual Resources

Reclassification of the public land south of I-15 as Class L would reflect a concern for scenic values and a desire that developments on public land be limited or mitigated to avoid or minimize impacts on visual resources. There would be somewhat less opportunity for unsightly land uses, and slightly less deterioration of scenic quality than might occur under other management.

Minerals

Acceptance of this alternative would have little or no affect on minerals (see Alternative A).

Lands

Acceptance of this alternative would leave available the option of acquiring the private lands south of I-15 within the amendment area for incorporation into the Scenic Area. However, designation of these lands as Class L would be inconsistent with the existing multiple use classification of the surrounding lands as Class M. Acceptance of this alternative would be inconsistent with the original intent of the Desert Plan to dispose of public lands within the immediate environs of existing communities such as Baker.

Alternative C: Change to Class M the unclassified land within the amendment boundary and south of I-15 with the intention of not disposing of it. Leave the EMNSA boundary at I-15.

Social

This alternative would have the same effect on urban development in the Baker area as Alternative B.

Visual Resources

Same as Alternative B.

Minerals

This alternative would have little or no effect on minerals.

Lands

Alternative C, like Alternative B, would leave open the possibility of acquiring the private lands south of I-15 for incorporation into the Scenic Area. Reclassification of the public lands as Class M (with intention to not dispose) would be consistent with the classification of the surrounding lands and would avoid the spot zoning proposed by Alternative B, while accomplishing the same objectives.

Alternative D: Reject amendment (no action)

If no clarification of land use status in the Baker area was made, the status quo would continue. Confusion would remain because the boundary of the scenic area would overlay unclassified public lands that have been identified for disposal.

The opportunity for community expansion and development would remain as it is at present, with 192 unencumbered acres available north of I-15 and 317 acres available south of I-15. North of the highway, 675 acres are encumbered by mining claims and an airport lease. South of I-15, 130 acres of unclassified land are encumbered by mining claims. All of the private lands would be subject to development unless they were acquired by the Bureau. It is conceivable that new development might be forced further into the Scenic Area on private lands adjacent to Kelbaker Road because of a scarcity of usable land closer in.

If Part a) of Alternative A, the reclassification of Class M land to unclassified within the amendment area, were accepted and Part b), the EMNSA boundary change, were rejected, the boundary of the EMNSA would then encompass an additional 419 acres of unclassified land. Eventually, as this land was sold, the entire corner of the Scenic Area would be privately owned. Although the BIM could encourage the Baker community to develop this area in a manner compatible with the goals of the Scenic Area, actual development of these, as well as all other private lands, is in the hands of the local jurisdiction and the property owner. The interface between the Baker unclassified area and the EMNSA would be much more confusing than if the two boundaries coincided.

Visual Resources

Impacts on visual resources would probably be slightly less than for Alternative A, since only a little over half of the public land south of I-15 is presently unclassified and available for sale and development. For the same reason, the impact would be greater than for Alternative B or C, neither of which would provide any public land for development south of I-15. It should be pointed out that the FMNSA designation did not add any new regulatory requirements to the area's management. Protective measures were applied by designating most of the Scenic Area for multiple use classes C and L. BIM's goal to maintain the area's scenic quality would not be altered by this minor boundary change.

Minerals

There would be no change in the status of treatment of locatable, saleable, or leaseable minerals.

Burros

No change in present situation.

Alternative E: Change to Class M the unclassified land within the amendment boundary and south of I-15, with the intention of not disposing of it. Adjust the boundary of the EMNSA to coincide with the south and east sides of the amendment boundary.

Social

This alternative would have the same initial effect on urban development in the Baker area as Alternatives B. In the long term, public lands south of I-15 would become available for disposal and development after all private lands had been utilized.

Visual Resources

Same as Alternative B.

Minerals

This alternative would have little or no effect on minerals.

Lands

The effect of reclassification of the public lands as Class M, with the intention to delay disposal, would be the same as for Alternative C. Effects of changing the EMNSA boundary would be the same as in Alternative A.

AMENDMENT EIGHT CHANGE SECTION 10, T 4S, R 6E, FROM UNCLASSIFIED TO L

Alternative A: Accept amendment

Cultural Resources

It is unlikely that the proposed land reclassification would have any direct impacts upon any cultural resources present. Regardless of land classification, procedures of the Nation Historic Preservation Act must be followed for any project that would impact cultural resources. These procedures are summarized in Appendix G. If reclassification to Class L changed the number or scope of activities allowed, there would be a proportionate change in project-related impacts upon cultural resources.

Wildlife

Section 10, T 4S, R 6E, is included within the Coachella Valley Preserve (CVP), an area which is to be managed for preservation of the Coachella Valley Fringe Toed Lizard (please see Chapter III p. 3-41). Reclassifying the section from Unclassified to Class L would be consistent with the intent of the Bureau to retain land in the CVP for consolidation with other public land in order to protect CVFTL habitat.

Actual mangement of the section is not expected to change, because management of endangered species overrides the multiple use classification. However, Class L would be more consistent with the general management philosophy, now that the section has been identified for retention. This same management philosophy would be extended to any land acquired by the BIM within the Coachella Valley Preserve System.

Vegetation

Acceptance of the amendment is not expected to affect rare or sensitive plants or any known unusual plant assemblages, since none have been recorded in this section.

Alternative B: Reject amendment (no action)

Cultural Resources

Rejection of this amendment would have no foreseeable impact on cultural resources

Wildlilfe

Rejection of the proposed amendment would not change the actual management of Section 10 or of any lands acquired within the Preserve System. Multiple use classification does not affect the management of an endangered species. Although the land is unclassified, the tone of the management has been set, and a change in classification would not alter that management. From a planning standpoint there would be some inconsistency in retaining and actively managing unclassified land when this classification was originally intended primarily for land tenure adjustment.

Vegetation

Rejection of the amendment is not expected to affect rare or sensitive plant species or any known unusual plant assemblages.

AMENDMENT NINE - CHANGE TO CLASS L THE UNCLASSIFIED LANDS IN THE COACHELLA VALLEY WHICH ARE TO BE MANAGED FOR USES COMPATIBLE WITH CVFTL

Cultural Resources

Same as Amendment 8

Wildlife

Management of these public lands is not expected to change as a result of designating them Class L instead of unclassified. These scattered sections are referred to in the Habitat Conservation Plan - (please refer to Amendment 8 for background) as areas in which conservation of the CVFTL is not the primary goal, but where substantial conservation can be attained by management of compatible uses. This policy would be implemented whether the public land was classified or not. Accepting the amendment would be consistent with the intent of the BIM, in that lands left unclassified were generally intended to be used for land tenure adjustment. Now that these lands have been identified for retention by the HCP, which the BIM helped author, it is appropriate that they be reclassified as Multiple Use Class L.

Vegetation

It is unlikely that a land reclassification would affect the management of the BLM sensitive plant species which occur or are expected to occur on these parcels. If reclassification significantly changes the land uses allowed by other BLM programs (recreation, minerals, etc.), sensitive plant species could possibly be affected (presumably to a positive extent) if less surface disturbance of the lands were allowed under reclassification than at the present.

Alternative B: Reject amendment

Cultural Resources

Rejection of this amendment will have no foreseeable impact on cultural resources.

Wildlife

The actual management of these parcels would not change as a result of rejecting this amendment. However, from a planning standpoint, there would be some inconsistency in retaining unclassified land when this classification is intended for land tenure adjustment.

Vegetation

Rejection of the amendment is not expected to affect rare or sensitive plant species or any known unusual plant assemblages.

AMENDMENT TEN
RECLASSIFICATION OF PANAMINT RANGE OUTSIDE OF WSA'S

Alternative A: Approve amendment

Cultural Resources

There are very high cultural values in the Panamint Range. Historic and prehistoric sites have been recorded in Pleasant Canyon and Surprise Canyon. Historic sites are associated with mining and range from relatively simple house foundations to more complex sites with mills, chute platforms and cabins.

Many prehistoric sites have also been identified. Activities indicated at the sites are tool making and food processing. Some sites may be associated with pinyon nut collection. A unique and exceptional site has been identified at the Mormon Gulch area.

Cultural resources could be adversely affected by land reclassification. Although some cultural resources have been identified, the Panamints have not been systematically inventoried, and it is probable that there are many important sites which have not yet been recorded. Mining operations would be less regulated under the guidelines for Class M than they currently are under Class L guidelines and, thus, could negatively affect the integrity of such sites. In Class M, operations on five acres or less require a notice, while in Class L such operations require a plan of operations. All plans of operations are subject to NEPA review.

Minerals

Acceptance of the amendment would minimally facilitate mineral exploration and development in areas of 5 acres or less in the non-WSA portions of the Panamint Mountains. In C and L, plans of operation (PCO) must be submitted for any operation regardless of acreage, except for casual use. In class M, only a Notice is required for operations affecting 5 acres or less. A PCO is subject to a review and approval period of 30 days with an extension of another 60 days, if required. A notice is not subject to review and approval; however there is a 15-day period during which the authorized officer can impose reasonable measures to mitigate any activities that could cause unnecessary or undue degradation. Thus, there would be less regulation over mining activities in areas of 5 acres or less in those areas reclassified to the less restrictive Class M. The Bureau would, however, retain the right to place limitations on access route construction in Class M areas.

Wildlife

Reclassification to a less protective status could result in increased disturbance to wildlife by the activities associated with mining and other uses. Potential activities with major impacts to wildlife include, but are not limited to, off-road vehicle use, noise, firewood gathering, water diversions, short and long-term residency. Impacts would consist of increased disturbance and displacement of species requiring solitude, such as bighorn sheep, and probable destruction of valuable riparion habitat.

Bighorn sheep, a BLM-listed "sensitive" subspecies, inhabit the Panamint Range and have been recorded recently within the Pleasant Canyon area. In addition, the Pleasant Canyon/Middle Park/South Park area supports populations of mule deer and mountain lion (the latter a fully-protected species by the State).

Also susceptible to impact from increased mining would be such species as the Panamint alligator lizard (endemic to the northern desert ranges), the Pacific tree frog (scarce in desert locales), Panamint kangaroo rats, Panamint chipmunks, pallid bats, big brown bats, and the ringtail cats. Impacts to perennial streams, occuring in Pleasant Canyon, Surpise Canyon, etc., would occur. Reclassification to a less protective status could lead to serious impacts to water sources and to the vegetation and wildlife dependent upon them.

Vegetation

A number of Unusual Plant Assemblages (UPA's) are present in the subject area. These could be threatened by less-regulated exploration and development for mining. Two of these, cottonwood-willow streamside woodland and seep/spring vegetation could be seriously impaired by less regulated road construction and use, as well as by increased water diversion. Bristlecone Pine Forest and other woodlands could be impacted by illegal firewood cutting. The three sensitive plant species listed in the ACEC Management Plan (Dudleya saxosa, Enceliopsis covillei, and Phacelia mustelina) could be impacted through road construction and other surface disturbance related to mining operations.

Alternative B: Reject amendment (no action)

Minerals

Rejection of the reclassification would retain the requirement for submission of POO's for those areas presently listed as Class L which are outside WSA's. As BLM is required to address road construction and water diversions for mining operations, regardless of use-class, and as these are main components of most POO's, rejection should not affect the length of review for most proposed operations. There is no evidence to show that the mining community has been discouraged from exploration and development by the requirement for POO's.

Other Resources

Impacts on wildlife, vegetation and cultural resources would not increase, but would continue at the present rate.

AMENDMENT ELEVEN

CHANGE AREA SOUTH OF JOHNSON VALLEY OPEN AREA FROM MUC I TO MUC M.

Alternative A: Accept amendment.

Wildlife

This amendment would have a positive but low or negligible impact on wildlife in general. Over the long term, as vegetation is reestablished, this favorable impact could be significant. A thorough information, signing and enforcement program would be necessary for success. Species diversity and population densities would be enhanced.

Vegetation

Acceptance of this amendment has the potential of enhancing botanic resources because it would result in the application of a more intense management philosophy and, in general, provide a greater degree of protection for resources. It would, in effect, create a buffer zone between the Class I Johnson Valley Open Area and the Creosote Rings ACEC. Realization of the positive impact of this amendment would undoubtedly take years and, in the interim, be considered negligible.

Recreation

Acceptance of the amendment should result in a reduction in opposition to motorized vehicle recreation by local inhabitants and, thus, enhance the continuance of these activities.

Alternative B: Reject amendment (no action)

Wildlife

The negative effect of Class I uses on wildlife and the ecosystem would continue.

Vegetation

Rejection of this amendment would result in the continued degradation of vegetative resources due to the overflow of activities from the Johnson Valley Open Area. Encroachment of these activities into the Creosote Rings ACEC would continue.

Recreation

Rejection of the amendment would permit continuance of trespass by ORV users on the private lands interspersed through this area and continuance of the conflict between residents and ORV users as to where the latter can enjoy their form of recreation. Rejection would permit continued confusion concerning where cross country vehicle use is or is not permitted.

Alternative A: Accept amendment

Reclassifying 245 acres of MUC L land to unclassified status would add to the potential exchange or sale base. The percentage increase would be negligible when compared to the unclassified land base of over 150,000 acres in the Barstow Resource Area.

The change would acknowledge the Bureau's intention to sell the remaining portions of land in this small tract area.

Alternative B: Reject amendment (no action)

The present situation of having a scattering of small tracts within an area of predominantly private land would continue. Rejection would result in denial of the first step in remedying this otherwise unmanageable situation.

AMENDMENT THIRTEEN ACEC BOUNDARIES

A. CLARK MOUNTAIN (ACEC No. 19)

Alternative A: Accept amendment

Cultural Resources

Addition of 1,270 acres on the eastern side of the ACEC would provide additional protection for Ivanpah, the oldest townsite in the East Mojave, where there are still many historic ruins and relics.

Wildlife

Addition of the 3,000 acres along the northern edge of the original ACEC boundary would incorporate bighorn range north of Keany Pass and aid in protection of important foraging areas and migration corridors for this species.

The 600 acres deleted from the western portion of the ACEC consist of low sloping hills, plains, and alluvial fans. Extensive field surveys have shown that this land is of marginal importance as habitat for wildlife.

Vegetation

Included in the area added along the northern edge is habitat for Rusby's desert mallow (Sphaeralcea rusbyi var. elemicola), a BLM sensitive species

which is a candidate for listing as threatened and endangered by the U.S. Fish and Wildlife Service and is on the CNPS list as rare and endangered in California and elsewhere. The plant occurs in the vicinity of Keany Pass.

Other Uses

The proposed ACEC boundary would be easier to locate on the ground, since it would follow aliquot survey lines instead of a vague boundary which does not follow any topographic features. The action would not affect vehicle access designations or interfere with mineral exploration or development, livestock operation, utility corridor management, or other existing uses in the area.

Alternative B: Reject amendment (no action)

Wildlife

Management of bighorn range north of Keany Pass would be excluded, causing minor impacts on the habitat of bighorn which range between the Clark and Mesquite Mountains.

Vegetation

Habitat for the sensitive plant species Rusby's desert mallow (Sphaeralcea rusbyi var. eremicola) would be excluded from ACEC management. Although these plants were recently shown to occur more widely than was originally expected, ACEC management of part of the habitat is desireable.

All Resources

The opportunity to fund protective actions for sensitive vegetation, wildlife, and cultural resources occurring in the additional areas would be lost. The original boundary which was ambiguous and hard to locate on the ground would be maintained, thus complicating management of the ACEC.

B. YUHA BASIN (ACEC No. 64)

The original ACEC was nominated to protect significant wildlife and cultural resource values. Monitoring in 1984 showed that the original boundary excluded important habitat for the flat-tailed horned lizard, a species which is a candidate for listing as an endangered species (U.S. Fish and Wildlife). The boundary also omitted several areas containing cultural resources which have since been listed or are eligible for the National Register of Historic Places, as well as areas which have a high potential for cultural resources.

Alternative A: Accept amendment

Wildlife

Acceptance of the amendment would provide recognition of the highest relative abundance of the flat tailed horned lizard in the Yuha Basin and would ensure consideration of this area in future management. It would also provide a higher probability of internal and external funding and a better commitment to monitor the resource condition.

Cultural Resources

Cultural resources will enjoy the same benefits noted for wildlife.

Minerals, Recreation

No negative effects are anticipated on sand and gravel mining, geothermal development, or recreation.

Alternative B Reject amendment (no action)

Wildlife, Cultural Resources

Although protective measures outlined in the 1985 Yuha Desert Management Plan would be continued, the area south of Highway 98 would receive lower priority for funding and monitoring if this expansion of the ACEC were rejected. This could result in some irreversible loss of wildlife and/or cultural resources.

C. GOLD BASIN/RAND INTAGLIOS (ACEC No. 67)

Alternative A: Accept amendment

Cultural Resources

This ACEC contains a series of rare ground figures, or intaglios, which are assumed to be of Native American derivation. These figures are scraped into the rock-covered desert pavement surface. They are extremely fragile and susceptible to damage. They are considered eligible for inclusion on the National Record of Historic Places as part of a thematic group. A recent Class II inventory revealed that the intaglios actually lie south and west of the originally designated area. Accepting the amendment would permit correction of this mapping error and provide protective management for these unique resources.

Native Americans

Native American tribes were not consulted about this amendment, since it is only an administrative change. Representatives of various tribes will be consulted during preparation of the management plan.

Minerals

The mineral industry would not be affected by this amendment. Geothermal and oil and gas potential is minimal. Mineral exploration has occurred previously in the vicinity, where there are limited mineral values. However, their low economic quality and expensive recovery requirements make extraction unfeasible at this time. Individual ground figures are located on discrete terraces. Withdrawal from mineral entry could be localized and would not have to encompass the entire ACEC. Additional mineral exploration would be permitted, if necessary and guided by 43 CFR 3809 procedures.

Alternative B: Reject amendment

Rejecting the amendment would remove the proposed ACEC status from these sensitive intaglios. Failure to execute a management plan would make protection and funding more difficult. Although most of the ground figures are currently fenced, additional protective measures are needed to fully protect them from off-road vehicle damage or casual mineral exploration. Interpretative programs would also be limited without the funding which accompanies ACEC status. Finally, maintaining the ACEC in its present location would place unnecessary restrictions and limitations on that public land.

D. PLANK ROAD (ACEC No. 72)

Alternative A: Accept amendment

Cultural Resources

The current ACEC boundary contains only the small portion of the original wooden road which is adjacent to Gray's Well. Acceptance of this amendment would ensure consistent management of all of the remaining segments of the road, portions of which are considered eligible for inclusion on the National Record of Historic Places. The integrity of the road segments varies considerably, and management would depend on the road conditions, with the best preserved portions recieving the most attention.

Recreation

A slight loss in ORV opportunities would result from fencing off portions of the road. However, the recreational community would benefit from burial of

remnant portions of the road where they constitute a safety hazard. Interpretation programs would exist throughout the ACEC to educate winter visitors on this unique resource.

Minerals

Mineral exploration and development should be unaffected by the amendment. Economic resources within the sand dunes are limited and widely available elsewhere.

Alternative B: Reject amendment

Cultural Resources

Rejection of the amendment would result in possible loss of important remnants of the Plank Road. Segmentation of the historic route would hamper effective management.

Recreation

Limiting the scope of the ACEC to the present small section of the road would limit the attention given to other redeemable portions of the road. Funding for hazard management and interpretation programs would be reduced.

AMENDMENT FOURTEEN
ESTABLISH AN ACEC AT WARM SULFUR SPRINGS

Alternative A: Accept amendment

Wildlife

Acceptance of the amendment would enable BLM to develop a site-specific management plan for the protection and enhancement of wildlife and wildlife habitat at this unique desert marsh. ACEC status would provide for the implementation of management actions on a priority schedule, to assure the continued existence and enhancement of the water sources and associated marsh.

Recreation

There would be no effect on motorized vehicle recreation. The proposed ACEC is located entirely within an area which is closed to motorized vehicles.

Minerals

The effect of accepting the amendment on mineral and energy development would be negligible. The potential for leaseable minerals and energy resources, including sodium, potassium, geothermal resources, and oil and gas exists in the vicinity. However, it is highly unlikely that these resources occur only on the proposed ACEC area. ACEC status would allow for reinforcement of the Bureau's discretionary authority to regulate mineral leasing activities to prevent impact to important natural and cultural resources. Further, acceptance of the amendment would lead to development of a protective management plan which could provide for future requests for site specific withdrawals to preclude entry under the general mining laws for locatable minerals (e.g., gold, silver, etc.).

ALTERNATIVE B: Reject amendment

Wildlife

Rejection of the amendment would leave this riparian area without any protective management prescription except the existing vehicle closure as called for in the CDCA Plan. Under current management, vehicle use is confined to designated routes compatible with protection of wildlife values. However, the restriction applies only to casual vehicle use typically associated with recreation and does not necessarily prohibit habitat disturbance caused by activities related to mining, as managed under the 43 CFR 3809 regulations.

Recreation

No effect.

Minerals

Mineral leasing actions could continue, but such development would probably be restricted in order to prevent significant impacts to the springs and marsh. The area would remain open for exploration and development under the general mining laws. The establishment of millsites for supporting activities could adversely affect the springs and marsh.

AMENDMENT FIFTEEN

CHANGE THE UNCLASSIFIED LANDS IN THE EAST MOJAVE NATIONAL SCENIC AREA TO CLASS L (EXCEPTING UNCLASSIFIED LAND IN THE BAKER VICINITY WHICH IS CONSIDERED IN AMENDMENT 7)

Alternative A: Change all unclassified land to Class L

Lands

Accepting this alternative would reclassisfy approximately 15,200 acres of lands in the EMNSA from unclassified to Class L. Under this designation, these lands could not be sold without a plan amendment, as only unclassified or Class M lands are eligible for sale. Such an action would indicate the intent of the Bureau to maintain these lands in public ownership. However, this alternative would foreclose the option of using these lands as a base for exchange for private lands within more significant areas.

The subject lands are largely in Lanfair Valley, with a small portion in the Cima area. Lanfair Valley is a sparsely populated vicinity approximately ten miles north of the town of Goffs. There are approximately 11,000 acres of public land interspersed with private lands. Livestock grazing is the principal land use. The San Bernardion County General Plan classifies the area as Rural Conservation/Desert Living, which allows such uses as airports, recreational vehicle parks, energy facilities, and 40-acre subdivisions. Although these uses are not expected in the immediate future, maintainance of this land as Class L would assure that these public lands would not be used for purposes which would be incompatible with the management philosophy of the EMNSA.

The area at Cima is designated by the County General Plan as a Desert Special Service Center. Retaining the lands here in public ownership under Class L would probably have little effect on commercial development around the small community of Cima, since most of the land immediately adjacent to the town is already privately owned. Unclassified land lies at least a mile to the east, west, and north.

Grazing

Unclassified lands in the Lanfair Valley and the Cima area lie within the Kessler Springs and Lanfair livestock grazing allotments. Reclassification to Class L would have little or no effect on the management of grazing operations.

Minerals

All of the unclassified lands are either under lease or are adjacent to lands which are under gas and oil leases. Acceptance of Alternative A would not curtail the development of the leases.

Alternative B: Change only the larger contiguous parcels of unclassified land to Class L

Lands

This alternative would change approximately two-thirds of the unclassified lands in the EMNSA to Class L. In the Cima area, 520 acres would remain unclassified, while 2,920 acres would be reclassified. The newly designated Class L land would recieve the same management as existing adjacent Class L

lands, and the small parcels of unclassified land would be available for sale or trade according to the needs of the Cima community.

In the Lanfair Valley, three blocks totaling 8,000 acres would be designated Class L and 4,320 acres would remain unclassified. The new blocks of Class L land would be subject to the same management as the surrounding Class L land. Although this land would not be available for land tenure adjustment, over 4,000 acres would remain for that purpose.

This alternative would have the advantage of placing about 11,000 acres of presently unclassified land in the EMNSA into a more protective land use classification while maintaining a fairly large base of disposable land. Its disadvantage would be that rather large blocks of Class L land would be surrounded by private lands for which incompatible uses might be proposed in the future. To avoid this, the Bureau would eventually need to exchange some of the remaining unclassified parcels for private lands in this vicinity in order to "block up" the private and public lands.

Grazing

Reclassification of part of the unclassified lands in the Kessler Springs and Lanfair grazing allotments would have no negative effect on grazing operations. Much of the land in these allotments is already in Class L.

Minerals

Acceptance of Alternative B would have no effect on development of oil and gas leases in the EMNSA.

Alternative C: Reject amendment (no action)

Lands

Rejection of the amendment would leave in unclassified status approximately 15,200 acres land which have no known sensitive resources or superior scenic qualities but which happen to be part of the EMNSA. Retaining the unclassified designation would indicate the Bureau's intent to dispose of the land, thus adding to the existing private land which is available for uses which would be incompatible with the management philosphy of the EMNSA. Some of the uses which which are allowed under the County's Rural Conservation/ Desert Living classification are: recreational vehicle parks, solar energy facilities, airports, motocross parks, and 40-acre lot subdivisions. The potential impact of the disposal of these lands is not known.

On the other hand, maintainance of these lands as unclassified would provide the bureau with land which could be disposed of in exchange for more desireable lands.

Grazing, Minerals

This alternative would maintain the status quo. There would be no effect on grazing or oil and gas development.

AMENDMENT SIXTEEN

REVISE ORV DESIGNATION FOR CADIZ DUNES

The following analysis was based on the assumption that a seasonal ORV closure will be in effect from March 1 through September 1 for any portion of the dunes that may be designated open.

Alternative A: Designate 5,760 acres closed and 32,000 acres open. Change the open area from MUC L to MUC I.

Cultural Resources

BLM responsibility for cultural resources, as addressed in Section 106 of the National Historic Preservation Act, would be met through consultation with the California State Historic Preservation Office during development of a management plan for the area opened for ORV use. No impacts to cultural resources would be authorized until full compliance was reached. Avoidance or mitigation of impacts on sensitive cultural resources would be the preferred policy.

Wildlife and Vegetation

A significant portion of the area's perennial vegetation could be damaged by moderate to heavy ORV use over a period of time. This effect would be much less in areas of light ORV activity, since users tend to avoid vegetated areas. Seasonal closure of the open area could substantially offset ORV-related effects on vegetation and wildlife by protecting annual plant production and limiting intrusive use during wildlife breeding and rearing seasons. Wildlife species which are strongly associated with annual vegetation (i.e., Chrysomelid beetles) would therefore tend to be less affected. Anticipated light to moderate ORV use would not eliminate any species from the dunes. Overall impacts to biological resources if this alternative were adopted would be less than Alternatives B and D but greater than for Alternative C.

Recreation

This alternative would maintain closure of the highest and most scenic section of the dunes and provide continued opportunities for nature observers, photographers (including commercial users), and other non-ORV-oriented users. South of this area would be an open area of sufficient size and variation in terrain to provide a quality experience for dune buggy, ATV, and 4WD users. Included in the latter area would be a portion of the high dunes presently closed to ORV recreation. Open designation for this area would facilitate

enforcement of the closure of the northern dunes by eliminating the current ambiguous designation of existing routes of travel and providing better-defined use areas. The boundary between the open and closed areas would be easily identifiable and more easily managed than the existing boundary. This alternative would result in the best variation in potential recreational uses, but would require the most signing, patrol and other controls.

Alternative B: Designate 37,760 acres open to vehicle access; change from MUC \overline{L} to MUC \overline{I} .

Cultural

Same as Alternative A

Wildlife and Vegetation

Impacts to vegetation and to wildlife dependent on this vegetation would be similar to those described for Alternative A but would be greater than for other alternatives due to the opening of areas currently closed to vehicle use.

Recreation

This alternative would open the entire dune system to ORV recreation. This would increase the opportunities for activities requiring vehicles but would reduce the area's potential for non-ORV-oriented uses, particularly its desireability for some types of commercial photography.

Recreational use of the dunes would probably increase as the area becomes more popular with ORV enthusiasts. Costs for signing and ranger patrol would be lower than for any of the other alternatives. Management would be easier, since no closure would have to be enforced, except during seasonal closure.

Alternative C: Designate 37,760 acres closed to vehicle access.

Cultural Resources

No action would be required for protection of cultural resources. No additional impacts would occur.

Wildlife and Vegetation

Closure would provide for protection of vegetation and wildlife and could lead to increased animal populations.

Recreation

Adoption of this alternative and closure of the entire dune system would impact ORV groups who have made use of the dunes for, in some cases, over 15 years. Users would be required to find alternative areas, which might create adverse conditions elsewhere. Enforcement would require a strong management presence to ensure that users were aware of the closure and obeyed it.

Alternative D: Reject amendment (no action)

Cultural Resources

In the absence of the necessity to produce a management plan for this area, potential inadvertant damage to cultural resources would continue.

Wildlife and Vegetation

Current impacts to these resources would be unchanged. However, any benefits to be gained from continued closure of the proposed open area in Alternative A could be conteracted, at least partially, by the lack of seasonal closure, as proposed for the other alternatives.

Recreation

Adoption of this alternative would allow continuation of current vehicle access in this area. Confusion about permitted uses would remain, and enforcement of the southern boundary of the closed area would continue to be difficult. Since the dunes would not be mapped and advertised as an open area, it is probable that use levels would remain lower outside the closed area than if Alternative A were adopted. ORV use would not be regulated by seasonal closure. However, the resulting impacts could be offset by the generally lighter use.

AMENDMENT SEVENTEEN
COLTON HILLS GRAZING ALLOTMENT

Alternative A: Delete grazing south of I-40

Cultural Resources

There are no inventoried sites within the allotment south of I-40. If sites are present the elimination of grazing could help preserve the integrity of the sites.

Livestock grazing would cease south of I-40, and cattle would no longer range into bighorn sheep habitat in the Clipper Mountains. Potential livestock-related impacts to bighorn would discontinue. It is reasonable to expect that bighorn carrying capacity would be increased by at least a small increment due to elimination of livestock competition and that the Clipper Mountain bighorn herd would at least stabilize and, possibly increase in future years.

Grazing

Cattle would be excluded from the area south of I-40. This area is used as ephemeral range in the springtime. Although there would be a small loss to the overall range resources, there would be no change in Animal Unit Months (AUMs) for the allotment.

Alternative B: Delete grazing South of I-40 and west of Essex Road.

Cultural Resources

There are no inventoried sites within the allotment south of I-40 and west of Essex Road. If sites are present, the elimination of grazing could help preserve the integrity of the sites.

Wildlife

This alternative would allow cattle to graze south of I-40 but prevent them from entering the bighorn range by fencing the area east of Essex Road. This would provide the same benefit to bighorn sheep described for Alternative A.

Grazing

Cattle would be excluded from the bighorn range in the Clipper Mountains, but would still be able to graze in the springtime on ephemeral forage in the area east of Essex Road. Only a marginal loss of forage would occur due to exclusion from the Clippers. A water source would be available near the Fenner rest area which could be developed for livestock use.

Alternative C: Reject Amendment

Cultural Resources

If sensitive cultural resources are present in the subject area, they would continue to be affected by grazing. This impact is considered to be of minimal potential.

Livestock grazing would continue south I-40, and cattle would continue to range into bighorn sheep habitat in the Clipper Mountains. Potential impacts to bighorn, in the form of introduction and/or spread of disease, as well as competition for forage and water, would persist. Under the current situation, these impacts are probably occuring to at least a small degree. If these factors are influencing bighorn sheep negatively, the Clipper Mountains bighorn herd could experience a decline through decreased carrying capacity, reduced lamb recruitment, die off, or possibly emigration. Ultimately, the bighorn herd could stabilize at a new and lower level. In the worst case, which seems unlikely, the population could be extirpated.

Livestock Grazing

Rejection of the amendment could be slightly beneficial to the rancher, since his livestock could continue to use the ephemeral range south of I-40.

AMENDMENT EIGHTEEN

REDUCE WILD HORSE OR BURRO POPULATION TO ZERO IN MORONGO AND COYOTE CANYON HERD MANAGEMENT AREAS

A) MORONGO HMA

Alternative A: Accept amendment

Wild Horses and Burros

The Morongo HMA is impossible to manage due to the high percentage of intermingled private lands. Deleting the HMA and removing the entire herd of 5 to 20 burros would improve the management of the area by eliminating conflict with private landowners. However, removal of the burros would have a negative impact on the population of burros.

Wildlife

Removal of all burros could benefit wildlife but only to a very small degree. Conflict between burros and wildlife has not been a problem at current population levels.

Alternative B: Reject amendment (no action)

Wild Horses and Burros

The burro population would remain at status quo. Burros would not be removed and the conflict with private landowners would continue.

Retention of the herd at its current levels would continue a slight negative impact on wildlife. However, this impact would not be significant. This is because the 5 to 20 burros are spread out over a large HMA area. Wildlife would be affected only if the population of burros were to increase by a significant degree.

B) COYOTE CANYON HMA

Alternative A: Accept amendment

Wildlife

Removal of the horses would have a beneficial impact on wildlife. The Santa Rosa Habitat Management Plan (1980), which was established for the management of the State-listed threatened Peninsular Bighorn Sheep, called for removal of all feral grazing animals from this area for the protection of bighorns. There is a possibility of the transfer of diseases and parasites to the bighorn, as well as competition for water sources. This bighorn herd has been experiencing a low lamb survival rate over the last few years, and some diseases carried by livestock have been indicated.

Wild Horses and Burros

The herd of wild horses in the Coyote Canyon HMA has grown from 20 at the time the Desert Plan was completed to about 35 at the present. The herd has spread westward as far as the Terwilliger area and is causing problems for landowners and their domestic livestock and horses. Acceptance of this alternative would allow removal of this herd and would eliminate the above problems.

Alternative B: Reject amendment (no action)

Wildlife

Retention of the herd would have a continued negative impact on the habitat of the Peninsular Bighorn Sheep.

Wild Horses and Burros

Feral horses would not be removed, and conflicts with private landowners would continue.

AMENDMENT NINETEEN

REDUCE BURRO POPULATION TO ZERO IN CIMA DOME HERD MANAGEMENT AREA

Alternative A: Accept amendment

Removal of all burros would improve wildlife habitat and livestock grazing conditions by eliminating one of the three competitors for forage. Resources would be more available to native wildlife. Populations of certain species would likely increase, particularly those which were in more direct competition with feral burros.

Vegetation

Burro removal would have a beneficial effect on vegetation, which has been showing signs of damage due to burros. Prior to consideration of an increase in the number of livestock, there would be at least a five year period of vegetation monitoring to assess the response to burro reduction.

Grazing

Livestock grazing in this vicinity could benefit from the reduction in competition for forage. However, there would be no increase in AUMs until vegetation had been monitored as described above.

Burros

At the time the Desert Plan was implemented (1980) there were no burros in the White Rock and Thomas pasture areas of the Cima Dome HMA. Since then, buurros have migrated into the area and are competing with livestock and wildlife for forage. Removal of burros from these areas would facilitate burro management throughout the East Mojave Scenic Area.

Alternative B: Reject amendment (no action)

The present condition of overuse of vegetative resources in the subject area would continue. Livestock, wildlife and burros would continue to compete for insufficient forage. Scenic quality in the Cima Dome area would suffer from the effects of overgrazing. Eventually, an adjustment in the numbers of livestock and/or burros would be necessary.

AMENDMENT TWENTY

MODIFY THE EASTERN SAN DIEGO COUNTY PLANNING UNIT MFP.

Alternative A: Accept amendment

Cultural Resources

Five archaeological sites are known to be present on the newly acquired parcels. These sites contain quantities of ceramics, flakes, stone tools, and bedrock milling features. Under private ownership, extensive damage was

caused in one site by high levels of livestock use. Some impacts to cultural resources can be expected to continue at a low rate as long as cattle are present.

Livestock Grazing

The newly acquired lands would fall within the In-ko-pah pasture of the McCain Valley Allotment (USDI, 1983). Grazing use would be increased by 33 Animal Use Months (AUMs) to allow for the additional forage. This roughly corresponds to the grazing use made under private leases before the BLM obtained this property.

Lands

The newly-acquired lands are similar to the surrounding public lands in appearance and use. They have already been affected by management actions implementing earlier plans for this area (USDI, 1980, 1981). Since the parcels are surrounded by MUC L lands, a designation of MUC L would be appropriate. Acceptance of the amendment would eliminate the need for redundant planning by using the plans prepared in 1980 and 1981.

Alternative B: Reject amendment

Rejecting the amendment would make it necessary to carry out a new planning effort to evaluate the use of and impact to these parcels. Because of resource similarities, the new management plan would probably duplicate the Eastern San Diego County MFP. If grazing were to be prevented during this planning process, it would be necessary to fence off the adjacent grazing lands with 7.75 miles of fencing. Two cultural resource sites would be damaged by construction of the fence.

MITIGATION MEASURES

The following mitigation measures will be required by the BLM for impacts described in the preceding section.

AMENDMENT ONE
NAVY COOPERATIVE AGREEMENT - WEST SIDE

Cultural Resources

	Mitigation Measure	Alternatives
1)	Erect appropriate signs around two temporary closures until data recovery is complete. Conduct weekly ranger patrols.	A, D
2)	Erect fencing around northern tempo- rary closure until data recovery is complete. Complete fencing prior to implementing amendment.	A, D

Table 4-3
SUMMARY OF CUMULATIVE IMPACTS

Resource	Unit of Measure	No Action	Preferred Alternative	Percent Change	New Percent of Desert
Multiple Use Class					
C L M I Unclassified	Acres Acres Acres Acres	1,655,940 6,259,126 3,365,184 522,610 314,000	1,655,940 6,296,261 3,351,764 572,730 240,165	+ 0.0 + 1.1 - 0.4 + 3.1 -23.5	13.7 (17.3)* 52.0 (48.8) 27.7 (27.5) 4.7 (4.1) 2.0 (2.6)
Motorized Vehicle Access					
Open Limited Closed Undesignated	Acres Acres Acres Acres	523,000 9,301,860 1,978,000 314,000	582,360 9,292,330 1,982,950 259,460	+11.3 - 0.1 - 0.3 -17.3	4.8 76.7 16.4 2.1
ACECs and Special Areas					
Added Deleted Net change	Number Acres Number Acres Number Acres	0 0 0 0 0	1 34,461 0 790 +1 +33,671		

^{*} Percent of Area in Original Plan

	Mitigation Measure	Alternatives
3)	Perform site documentation and data recovery within both temporary closures.	A, D
4)	Conduct data recovery at both cremation areas.	A, B, C, D
5)	Conduct additional cultural resource distribution studies or sample inventories within Class I areas.	А, С
6)	Conduct archaeological site assessment, documentation and excavation of sites located within Class I areas, but located outside the temporary closures.	A, C, D
7)	Monitor site locations outside Class I areas and mitigate sites if studies show negative impacts from ORV traffic.	A, C, D
8)	Erect route designation and closed route signs according to results of route approval process.	A, D
9)	Develop BLM ranger patrol program to ensure route of travel designations are followed by the public.	A, C, D
10)	Close all Navy withdrawal areas to indiscriminate vehicle use by the public and enforce closure.	A, B, C, D
11)	Navy shall prohibit indiscriminate off- road vehicle travel by Navy personnel with in withdrawal areas, unless a cultural inventory has been performed.	A, C, D
12)	Designate corridors through Navy with- drawal areas for public access and motorcycle race activity. Perform appropriate environmental studies prior to designation. Sign and enforce route designation.	A , D
13)	Navy shall conduct a sample inventory over all Navy withdrawal areas and a Class III (100%) inventory over high sensitivity areas.	A, C, D
14)	Navy shall perform mitigation or data recovery at several known sites within the Bullhead and Camelot Drop Zones and other sites identified through inventory required in item 13.	A, C, D

Mitigation Measure Alternatives 15) Navy shall follow requirements found A, B, C, D within the National Historic Preservation Act of 1966 (36 CFR 800) for new target development or any other surface disturbing activity. 16) Require consultation with the State Historic A, C, D Preservation Officer to meet BLM responsibilities of Sect. 106 of the National Historic Preservation Act. Wildlife 1) Conduct additional flat-tailed horned A, B, C, D lizard inventory. If species is present, apply mitigation measures. 2) Monitor flat-tailed horned lizard popula-A, C, D tions in MUC I areas. Monitor flat-tailed horned lizard popula-A, B, C, D tions in Unclassified areas, with Navy OK as appropriate. Prohibit surface-impacting Naval activities A, B, C, D in high density flat-tailed horned lizard optimal habitat. Make this stipulation on any withdrawal applications. A, B, C, D 5) If the nature or location of current Navy activities change in the habitat of the flattailed horned lizard, perform specific environmental assessment(s) with Endangered Species Act, Section 7 consultation. Prohibit establishment of new race corridors A, B, C 6) outside of MUC I. A, B, C 7) Limit casual use and competitive events in the Parachute Drop Zone to two designated

A, B, C

A, B, C, D

Fence high density optimal flat-tailed horned

lizard habitat to exclude surface disturbances

corridors.

9) Establish ranger patrol.

8)

Mitigation Measure

Vegetation

- 1) Inspect all existing competitive event courses for plant species of special significance and prohibit the establishment of new courses outside of MUC I.
- A, B, C, D
- 2) Designate two corridors through the Parachute Drop Zone that may be used for competitive events. Prohibit all ORV use on unclassified land outside of these corridors.
- A, B
- 3) Fence off stands of more than 25 plants of Thurber's pilostyles in MUC I areas.
- A, C
- 4) Designate an unusual plant assemblage of Thurber's pilostyles covering Sections 31 and 32, T 14S, R. 12E, and Sections 26, 27, and 28 T 13S, R. 11E. This is the largest known population of this species on public land in California.
- A, C, D

- 5) Conduct a thorough in-season plant inventory in all newly-designated MUC I areas.
- A, C

Recreation

- 1) In the event of full Navy withdrawal of RSZ A, B, and C, develop a cooperative agreement to provide for continued BLM recreation management of RSZ B and C.
- В
- 2) Designate two public access corridors through the unclassified lands of the Parachute Drop Zone, RSZ A, to provide a direct connection between the Superstition Mountain and Plaster City Open Areas, or acquire a public access right-of-way through Section 16, T 15S., R 11E.
- A, D

- 3) Acquire all private property within the Class I (Open Area) designation.
- A, B, C, D
- 4) Establish a bulldozed trail along the boundaries of all Class I Open Areas to make them more visible and manageable.
- A, C, D
- 5) Fence the temporary closures to lessen the amount of patrol time required to protect them.
- A, D

AMENDMENT ONE NAVY COOPERATIVE AGREEMENT - EAST SIDE

Cultural Resources

Curcure	Tegoti ce	
	Mitigation Measure	Alternatives
1)	Prohibit any surface disturbance within Section 19 NE , T 14S, R 19E.	A, B, C
2)	Perform cultural resource inventories within the portion of ACEC 66 which would be placed under Navy withdrawal.	A, C, D
3)	Navy shall follow requirements of the National Historic Preservation Act of 1966 (36 CFR 800) for new target development or any other surface disturbing activity.	A, B, C, D
Wildlif	<u>e</u>	
	Prohibit any surface disturbance in Sec. 19 NE · T 14S, R 19E.	А, В, с
Vegetatio	<u>on</u>	
1)	Prohibit all surface disturbance in NE Sec. 19, T 14S, R 19E, to prevent the destruction of a valuable riparian community.	А, В, С
Recreation	<u>on</u>	
1)	In the event of full Navy withdrawal of RSZ A, B, and C, develop a cooperative agreement to provide for continued BLM recreation management of RSZ B and C.	В
2)	Fence the boundary of RSZ A near areas of recreational use concentration.	С
Lands		
draw Prod widt geot miss only	cate or reconfigure the Navy's proposed with- wals (unclassified areas) to preserve Energy fuction and Utility Corridor M at its present th. Rationale - This would provide for future thermal energy production and electrical trans- sion system reliability, while preserving the morth-south corridor from the Inperial Valley	A, C, D
w	the Coachella Valley, which was defined in 1980.	

Likewise, this relocation or reconfiguration would not jeopardize the Navy's use, since substantial improvements have not been made at this time. It would minimize future potential conflicts between fixed structures (towers and lines) and aircraft. Conversely, if the decision is made to retain the proposed location of the withdrawal, an amendment to the Desert Plan could be proposed which would move the utility corridor.

AMENDMENT SIXTEEN REVISE ORV ACCESS FOR CADIZ DUNES

1)	Establish means for signing and/or marking open area boundaries.	A, B, C
2)	Require annual monitoring to compare plant production in open and closed areas.	А, В, С
3)	Require consultation with the State Historic Preservation Officer to meet BLM responsibilities of Sect. 106 of the National Historic Preservation Act.	A, B, C
4)	Arrange for search for and dispose of unexploded military	A, B, C ordnance.

UNAVOIDABLE ADVERSE IMPACTS

The unavoidable impacts of the preferred alternative are summarized below:

Ame	endm	ent

1 West.

Preferred Alternative Unavoidable Adverse Impact

- Potential damage to archaeological sites in MUC I areas and withdrawal areas.
- Degradation of wildlife habitat (flattailed horned lizard) in MUC I and withdrawal areas
- Loss of vegetation due to ORV use and military activities
- Loss of ORV free play and cross country driving opportunities in Limited Areas.
- Loss of access to portions of Targets 101 and 103.
- Elimination of sponsor-option events on part of new limited area.

- Restrictions on oil and gas, geothermal and locatable mineral exploration and development.
- Reduction in existing extraction operations for saleable minerals

1 East - Potential damage to archaeological sites by military and ORV activities. - Degradation of wildlife habitat, including marsh habitat. - Damage to and possible elimination of sensitive vegetation on MUC and unclassified lands. - Displacement of camping facilities. - Same effects on minerals as on West Side. 15 - Loss of the option to use lands for sale or exchange for private lands. 16 - Damage of vegetation by heavy ORV use. - Disturbance of wildlife associated with

IRREVERSIBLE AND IRRETRIEVABLE RESOURCE COMMITMENTS

Irreversible and irretrievable commitment of resources occur when a wide range of future options are foreclosed. This can result from either devoting a geographic area to a particular use (such as livestock grazing) or changing the general land use guidelines for that area (such as a multiple use class change).

vegetation.

"Irreversible resource uses" imply a commitment of land or renewable resources to a use for a certain period of time, during which the resources are unavailable to other use. For the preferred alternative, these include the following:

Amendment	Irreversible Resource Commitment		
1	 Destruction of archaeological resources by ORV or military activities 		
	- Disturbance of habitat for an endangered species (flat-tailed horned lizard) in favor of ORV and military uses.		

- Reduction in diversity of plant species;
 increase in density of weedy species due
 to concentrated ORV associated activities
- Removal of vegetation in new roadways (Wheeler Road. etc)
- Partial loss of Thurber's pilostyles and and salton milkvetch in Class I areas on West Mesa.
- Loss of unrestricted access on 40,740 Ac of former Navy lease area being redesignated as a limited area.
- Loss of sponsor-option events in the area between the Correzo-Impact area and Target 103.
- Loss of vehicular access to 500 Ac of the Plaster City Open Area being redesignated Limited area and on the 1,280 Ac being withdrawn to the Navy.
- Public lands in the Barstow area would be removed from the EMNSA, permitting less restricted management of visual resources adjacent to EMNSA.
- Unclassified public lands would become unavailable for land tenure asjustment.

7

15

CHAPTER 5

CONSULTATION AND COORDINATION



CHAPTER V

CONSULTATION AND COORDINATION

NOTICES AND MEETINGS

The 1985 Amendment Process was announced at the meeting of the California Desert District Advisory Council (DAC) in San Bernardino, California on February 11, 1985. An invitation for proposals was sent to approximately 6,100 indivuduals, organizations, businesses, and governmental agencies in late February. It listed the criteria for evaluating amendment proposals and the final date for public input, April 30, 1985. A Federal Register notice was published on March 22, 1985 and a news release was issued on March 29, 1985.

Proposed amendments were reviewed by the DAC at the public meeting in Ridgecrest on May 17, 1985. This meeting, which also served as a scoping meeting for the Environmental Impact Statement, was announced in the Federal Register on April 11, 1985 (Vol. 50, No. 70) and May 8, 1985 (Vol. 50, No. 89).

The El Centro Resource Area staff carried out a lengthy coordination process on the proposed BLM/Navy Cooperative Agreement in Imperial County. They contacted local government officials, representatives of user groups, and other interested parties. A public meeting was held in San Diego on March 14, 1985 for discussion of the project. Four public workshops on the Recreation Area Management Plan for the Imperial Dunes were also used for studying the portion of Navy proposal on the East Mesa. The workshops took place on April 15, 16, 17, and 22, 1985 in El Centro, Yuma, San Diego, and Riverside. Additional informal discussions were held by the El Centro staff with the officials of Imperial County and with U.S. Congressman Duncan Hunter. A letter was sent to Native American tribal leaders informing them about the project and requesting input on important areas or sacred sites located within the study area. A copy of the letter and a list of recipients is included as Appendix F.

The Needles Resource Area solicited opinions on vehicular access in the Cadiz Dunes from several regional ORV and environmental groups in a letter sent out in March, 1985. The responses from the public were used in developing the alternatives for Amendment Sixteen.

PUBLIC INPUT

The Desert District received 29 responses to the invitation for amendment proposals. Thirteen (45 percent) were from individuals, nine (31 percent) from governmental agencies, four (14 percent) from organizations, and three (10 percent) were from businesses (mining and grazing).

Thirteen respondents offered 22 different proposals. Of these, 13 were from governmental agencies, five from individuals, three from businesses, and one from an organization. Six of the 22 proposals were recommended by the DAC and approved by BLM management for consideration in the 1985 Amendment Process. The remainder will be handled by other Bureau administrative actions or dropped as inappropriate. Each amendment proposal and its fate is listed in Appendix B.



LIST OF PREPARERS

NAME	OFFICE	TEAM ASSIGNMENT
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Donna Wood	п	Administrative Support (typist)
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Daryl Albiston	Barstow RA	Wild Horse and Burro, Social (7), Botany (11)
Roger Alexander	Needles RA	Botany (16, 17)
John Bailey	Needles RA	Recreation (16)
Don Banks	Indio RA	Recreation (9)
Jim Bickett	Needles RA	Wildlife (16, 17)
Jerry Boggs	Ridgecrest RA	Cultural Res., Minerals Wildlife, Botany (10)
Bill Collins	California Desert District	Affected Environmental Chart
Rick Gundry	11 11	Minerals
Dean Huibregtse	Barstow RA	Wild Horse and Burro (18)
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Gary Ryan Needles RA Lands, Livestock

Grazing, (15, 17)

Robert Schneider Needles RA Cultural Resourcrs

Wildlife, Botany (13a)

Arnold Schoek Barstow RA Lands, Visual

Resources (7)

Ken Schulte Barstow RA Minerals (7)

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GLOSSARY

Terms

ALLOTMENT: An area of land where one or more operators graze their live-stock. It generally consists of public lands, but may include parcels of private or state-owned lands. The number of livestock and period of use are stipulated for each allotment. An allotment may consist of several pastures or be only one pasture.

ANIMAL UNIT MONTH (AUM): (1) The amount of forage or feed required by an animal unit (i.e., one mature 1000-lb. cow or five sheep) for one month. (2) Tenure of one animal-unit for one month.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC): Areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

CALIFORNIA DESERT PLAN ELEMENT: A component of the California Desert Plan. Each element provides a more specific application of the multiple-use class guidelines for a specific resource or activity (such as wildlife or wilderness).

CLOSED AREA: No vehicle travel is allowed in these areas. It applies to all wilderness areas when established by Congress unless exempted and where provided for by management plans in ACECs and on certain sand dunes and dry lakes.

CULTURAL RESOURCES: Those fragile and nonrenewable remains of human activity, occupation, or endeavor, which are reflected in district sites, structures, buildings, objects, artifacts, ruins, works of art, architecture or natural features.

EAST MOJAVE NATIONAL SCENIC AREA: A region of the CDCA designated as a Special Area because of its unique cultural, scenic and recreation values. A management philosophy statement was published in the <u>Federal Register</u> on August 19, 1981. This statement will provide guidance during development of management plans for several special areas within the scenic area.

EPHEMERAL RANGE: Range consisting primarily of annual plants which varies in production annually according to fluctuation of precipitation and temperature.

EPHEMERAL/PERENNIAL RANGE: A range type intermediate between ephemeral and perennial range. Grazing is managed by first establishing a stocking rate based on the perennial forage, and then annually increasing that rate under the same procedures for ephemeral allotments.

FLPMA: The Federal Land Policy and Management Act of 1976 (Public Law 94-579, 90 State 2743, 43 USC 1701).

GEOGLYPHS: Designs on the ground surface. They can be found in three forms: one is a linear alignment of stones; the second is a design scraped into the soil surface (intaglios); the third can be either abstract forms, or representational figures.

HABITAT: The natural environment of a plant or animal.

HABITAT MANAGEMENT PLAN: Detailed plans developed specifically for wildlife habitats or species which require intensive, active management programs.

HERD MANAGEMENT AREAS: Wild horses and burro management areas. Populations of the animals are protected and managed within the areas through the development and implementation of Herd Management Area Plans (HMAP).

INTERIM MANAGEMENT POLICY (IMP): The Bureau's management policy for lands under wilderness review. The policy is to continue resource use on lands under wilderness review in a manner that maintains the area's suitability for preservation as wilderness (referred to as the "non-impairment standard").

KGRA: An area in which the geology, nearby discoveries, competitive interests, or other evidence would, in the opinion of the Secretary of the Interior, engender a belief in men who are experienced in the subject matter that the prospects for extraction of geothermal steam or associated geothermal resources are good enough to warrant expenditures of money for that purpose.

LEASABLE MINERALS: Minerals such as coal, oil, shale, oil and gas, phosphate, potash, sodium, sulphur in New Mexico and Louisana, silica deposits in certain parts of Nevada, geothermal resources and all other minerals that may be acquired under the Mineral Leasing Act of 1920, as amended.

LITHIC SCATTER: Stone debris left as a result of tool manufacturing or reshaping.

LOCATABLE MINERALS: Minerals that may be acquired under the Mining Law of 1872, as amended.

MANAGEMENT FRAMEWORK PLAN (MFP): A land-use plan for public lands which provides a set of goals, objectives, and constraints for a specific planning area to guide the development of detailed plans for the management of each resource.

MULTIPLE-USE CLASS: Public lands in the California Desert have been placed in one of four management classes (except for 300,000 "unclassified" acres). Class C includes those lands recommended as suitable for wilderness designation. Class L provides for generally lower-intensity management. Class M provides a balance between higher intensity use and protection of public lands. Class I is an intensive-use zone.

NATIONAL REGISTER OF HISTORIC PLACES: The official list, established by the Historic Preservation Act of 1966, of the nation's cultural resources worthy of preservation.

OFF-ROAD VEHICLE (ORV): Any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other terrain.

OPEN AREA: An area in which motorized vehicles may travel anywhere. It applies to those areas in Class I specifically designated open and to certain sand dunes and dry lakebeds.

PUBLIC LAND: Land administered by the Bureau of Land Management.

RIGHT-OF-WAY: The public lands authorized to be used or occupied pursuant to Title V of FLPMA (specifically Sec. 507) authorizing and granting use of federal lands to any department or agency of the United States for specified purposes. (See 43 CFR 2807).

RIPARIAN: Situated on/or pertaining to the bank of a river, stream or other body of water. Normally used to refer to the plants of all types that grow rooted in the watertable of streams, ponds and springs.

ROCKSHELTERS: Small rock overhangs or caves usually found in mountainous areas. Some contain perishables.

ROCK ART/ROCK ALIGNMENTS: Rock art, including pictographs and petroglyphs, stove circles and rock walls.

RSZ: Range Safety Zones which prioritize relative hazard risks and safety requirements with respect to noise, drop hazard, and aircraft accident potential.

SALEABLE MINERALS: Minerals such as common varieties of sand, stone, gravel, cinders, pumice, pumicite and clay that may be acquired under the Materials Act of 1947, as amended.

UNUSUAL PLANT ASSEMBLAGES (UPA): Stands of vegetation within the CDCA which can be recognized as extraordinary for one or more factors. Factors can include unusual age, size, high cover or density, or separation from main centers of distribution.

VISUAL RESOURCE (SCENIC VALUES): The land, water, vegetative, animal, and other features that are visible on all lands.

VISUAL RESOURCE MANAGEMENT: The planning, design, and implementation of visual resource management classes for all BLM resource management activities.

WILDERNESS AREA: (1) An area formally designated by Congress as part of the National Wilderness Preservation System. (2) An area formally designated as part of the State of California's Wilderness Preservation System.

WILDERNESS NON-SUITABILITY: A management recommendation, based on the application of wilderness suitability criteria, that the best use of resources comprising a Wilderness Stucy Area would be met without designation of the WSA as a compenent of the National Wilderness Preservation System, permitting uses which might not necessarily be comparable with wilderness values.

WILDERNESS SUITABILITY: A management recommendation, based on the application of wilderness suitability criteria, that the best use of the resources comprising a Wilderness Study Area would be designation of the WSA as a component of the National Wilderness Preservation System.

WITHDRAWAL: Withholding an area of federal land from settlement, sales, location, or entry under some or all of the general land laws for the purpose of limiting activities under those laws or transferring jurisdiction over an area of federal land to another government agency. (See 43 CFR 2300).

ACRONYMS AND ABBREVIATIONS

ACEC Area of Critical Environmental Concern AICUZ Air Installations Compatible Use Zones

APD Application for Permit to Drill

ATV All Terrain Vehicle

BLM Bureau of Land Management BR Bureau of Reclamation

CDCA California Desert Conservation Area CDFG California Department of Fish and Game

CNPS California Native Plant Society
CSD Community Service District

CVFTL Coachella Velley Fringe-toed Lizard

CVP Coachella Valley Preserve

C&MU Classification and Multiple Use

DAC Desert District Advisory Council

DLE Desert Land Entry

EIS Environmental Impact Statement EMNSA East Mojave National Scenic Area

HCP Habitat Conservation Plan

HI Historic Index

HMA Herd Management Area HMP Herd Management Plan

IID Imperial Irrigation District
IMP Interim Management Policy

ISDRA Imperial Sand Dunes Recreation Area

KGRA Known Geothermal Resource Area

Kv Kilovolts

MFP Management Framework Plan

MTP Master Title Plat MUC Multiple Use Class

NEPA National Environmental Policy Act

NOI Notice of Intent

OHV Off-Highway Vehicle ORV Off-Road Vehicle

POO Plan Of Operation

RAMP Recreation Area Management Plan

RNA Research Natural Area RSZ Range Safety Zone

R&PP Recreation and Public Purposes

ACRONYMS AND ABBREVIATIONS

SHPO	State Historic Preservation Office
SVRA	State Vehicular Recreation Area
UPA USBR USDI USN	Unusual Plant Assemblage United States Bureau of Reclamation United States Department of Interior United State Navy
USFWS	United States Fish and Wildlife Service
VUD	Visitor Use Days
VRM	Visual Resource Management
WSA	Wilderness Study Area
WMP	Wilderness Management Plan

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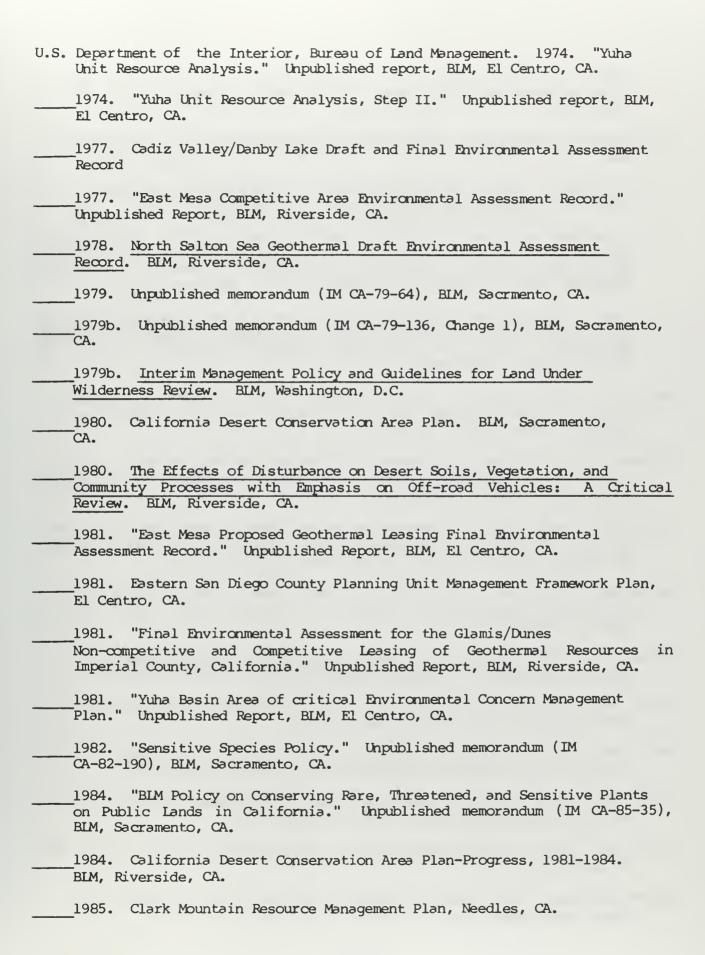
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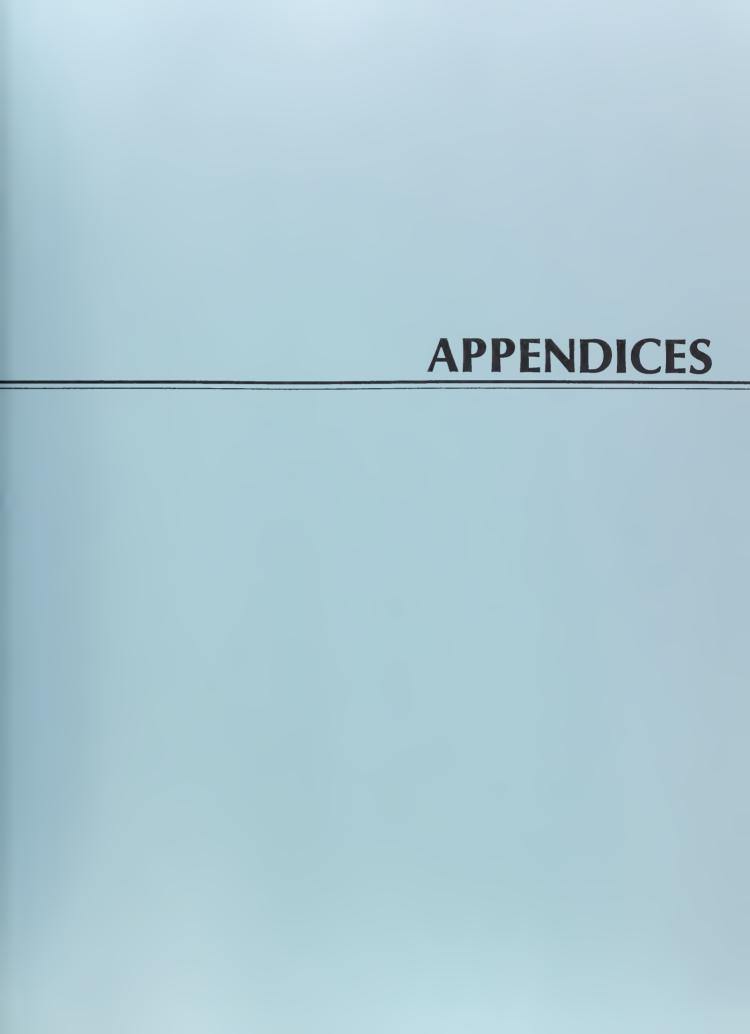


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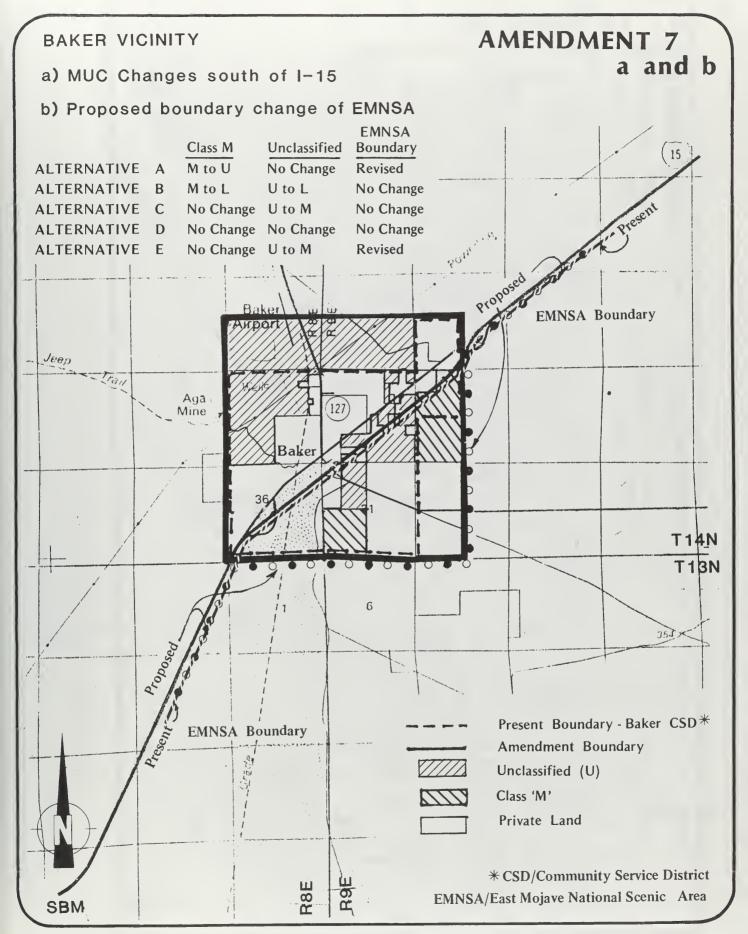


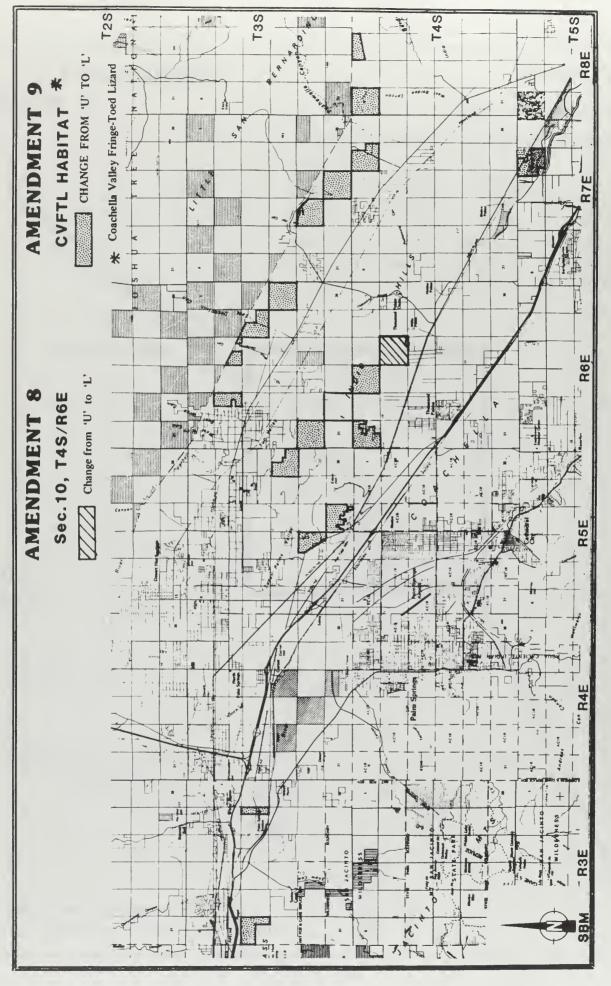


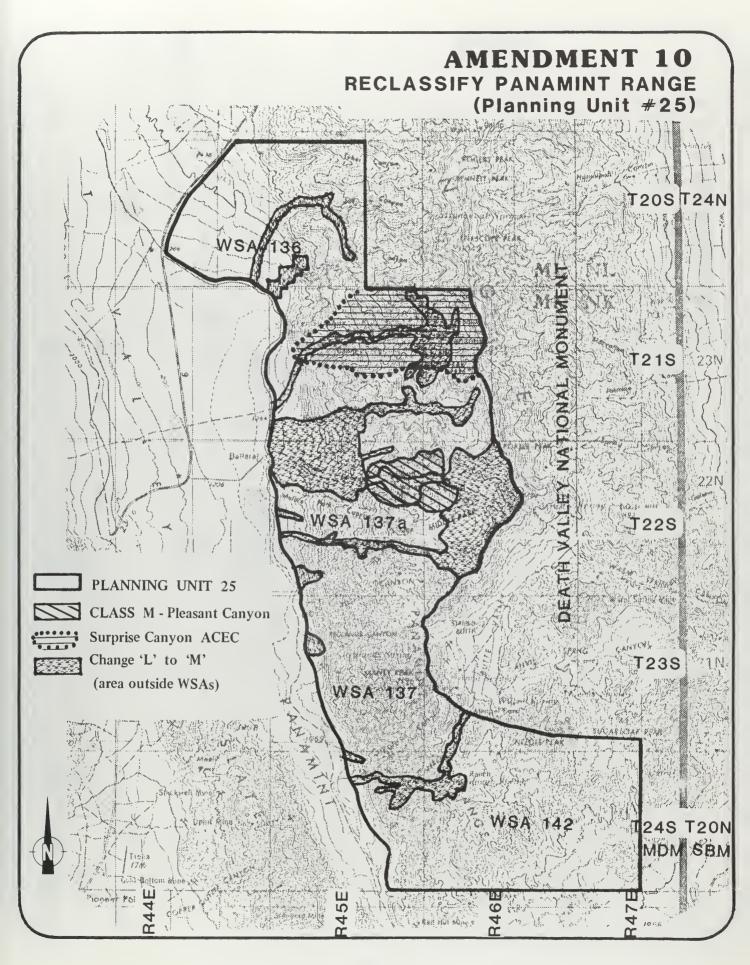
APPENDIX A

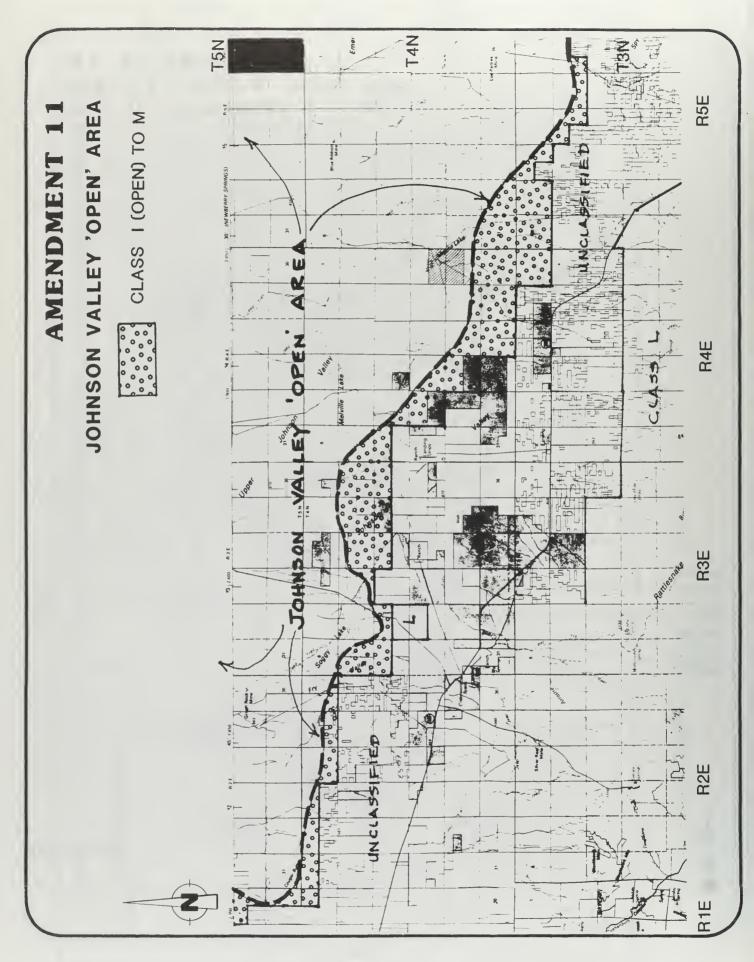
MAPS (EXCEPT AMENDMENT ONE)









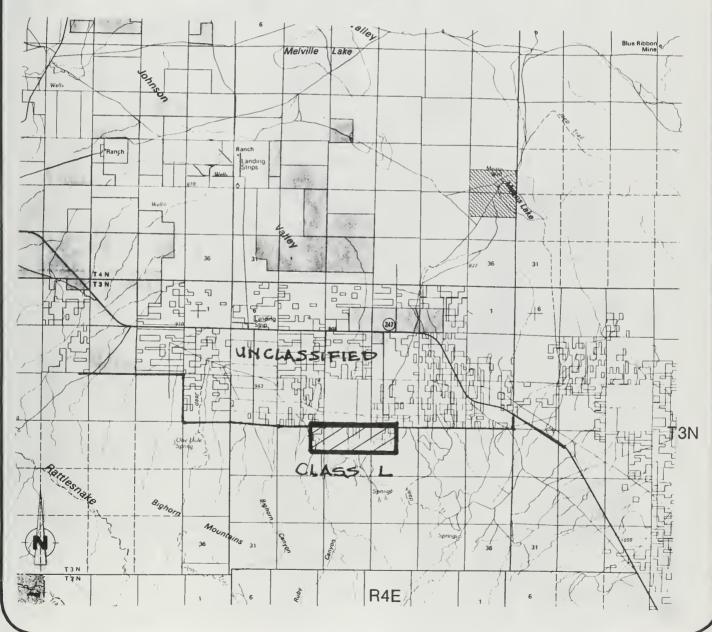


AMENDMENT 12

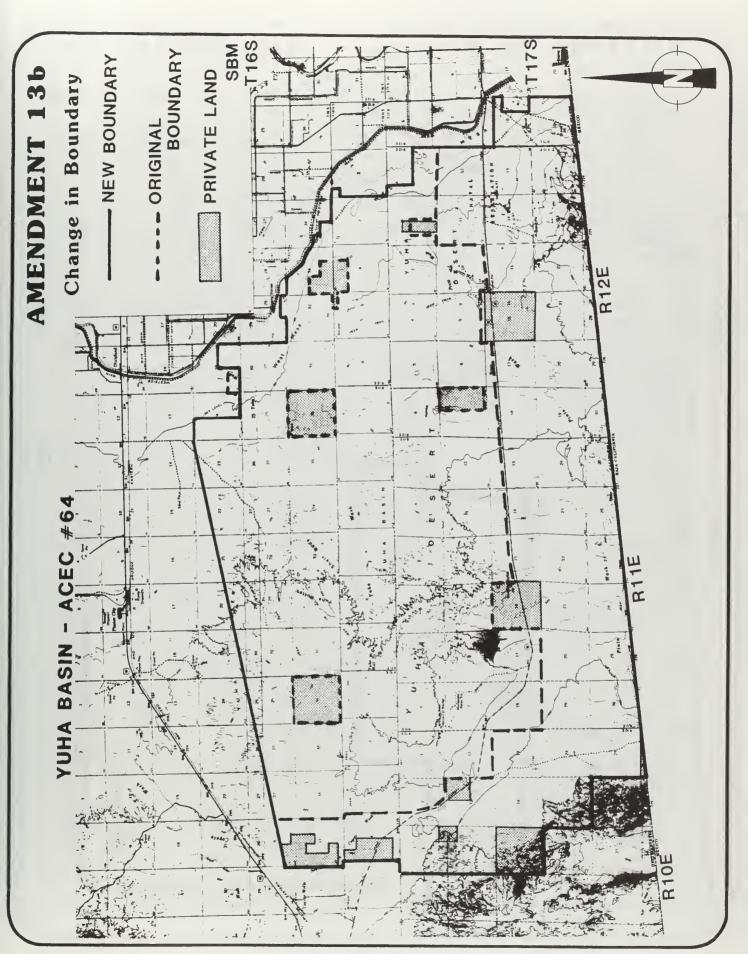
JOHNSON VALLEY
Small Tract Area

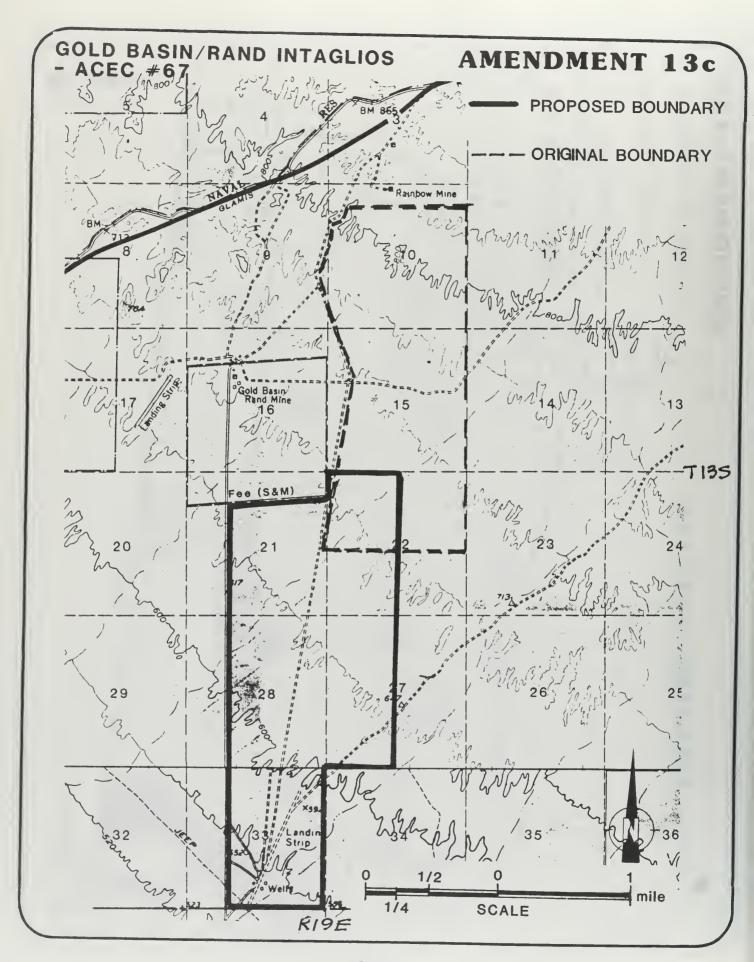


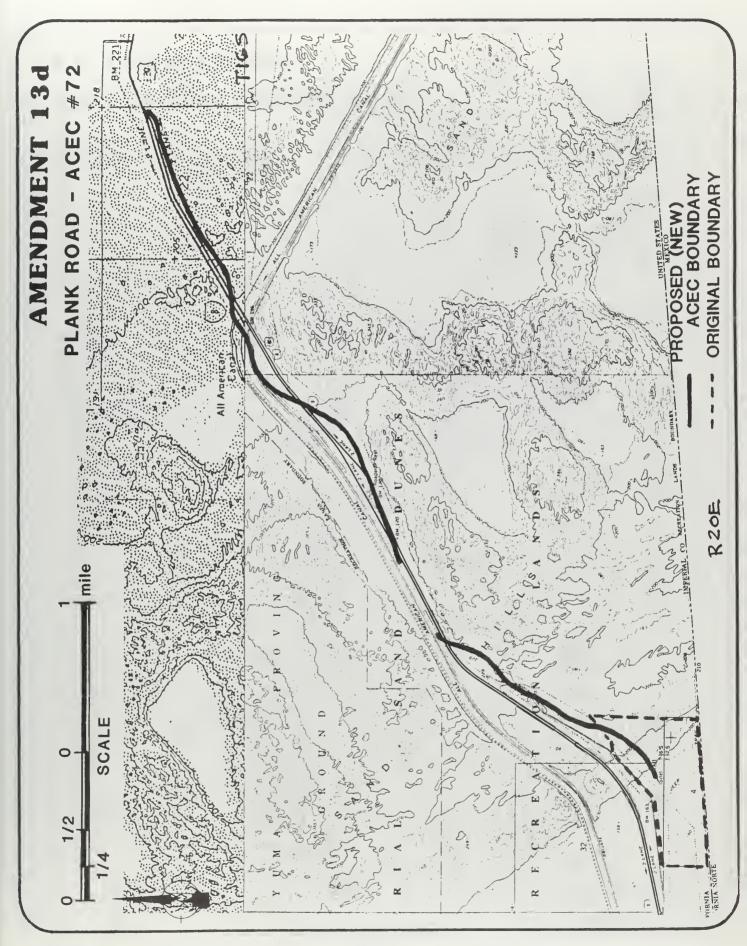
CLASS L to U (unclassified)

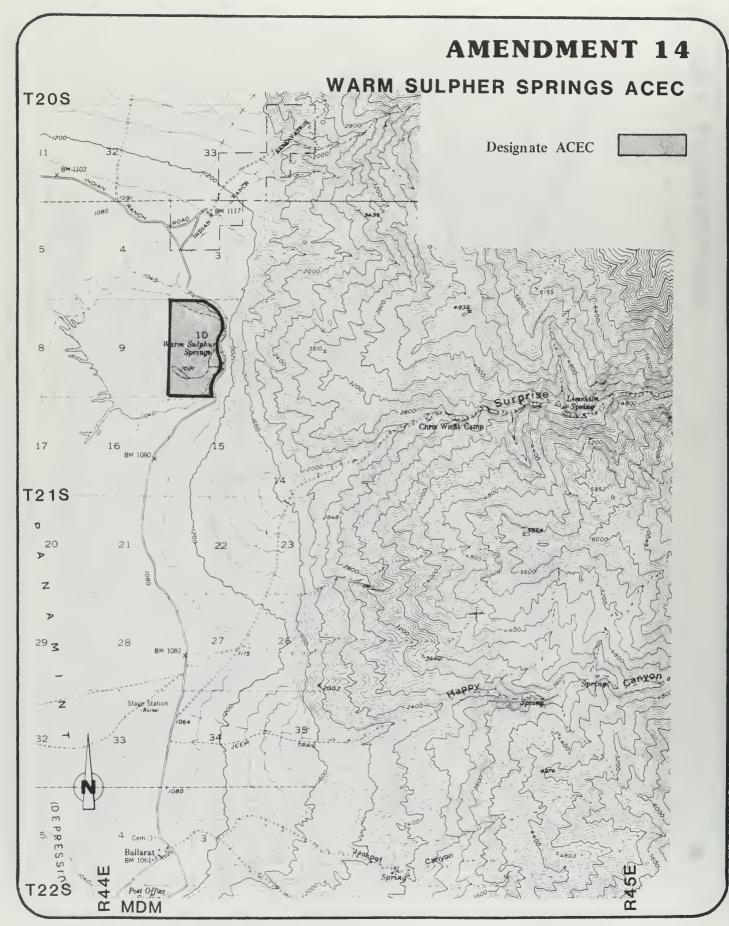


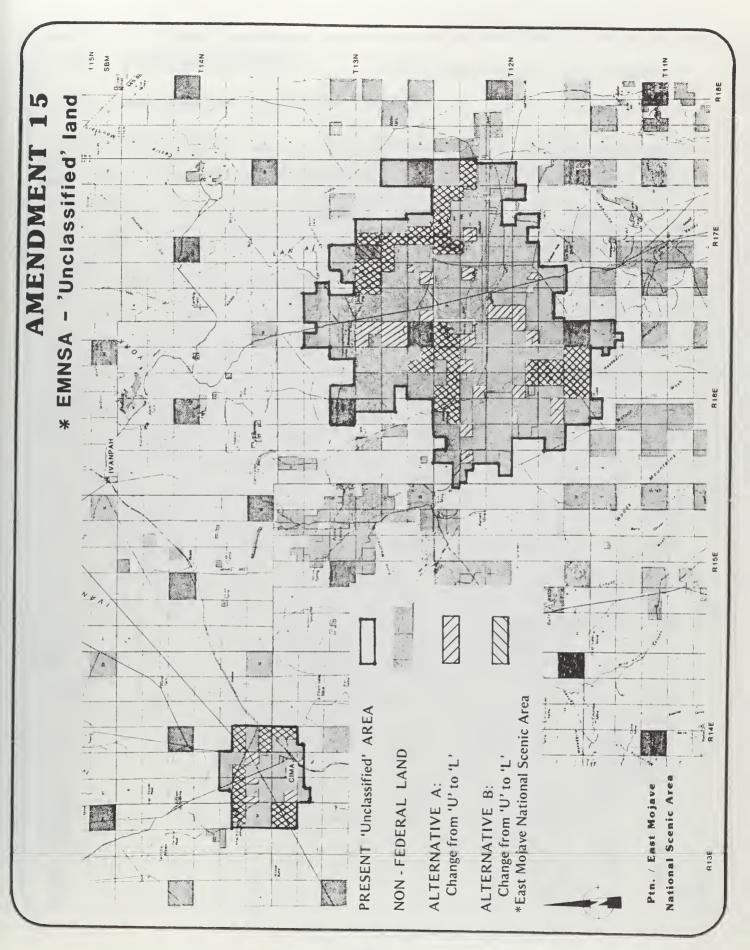
AMENDMENT 13a CLARK MTN - ACEC #19 PROPOSED BOUNDARY T18N ORIGINAL BOUNDARY T17N

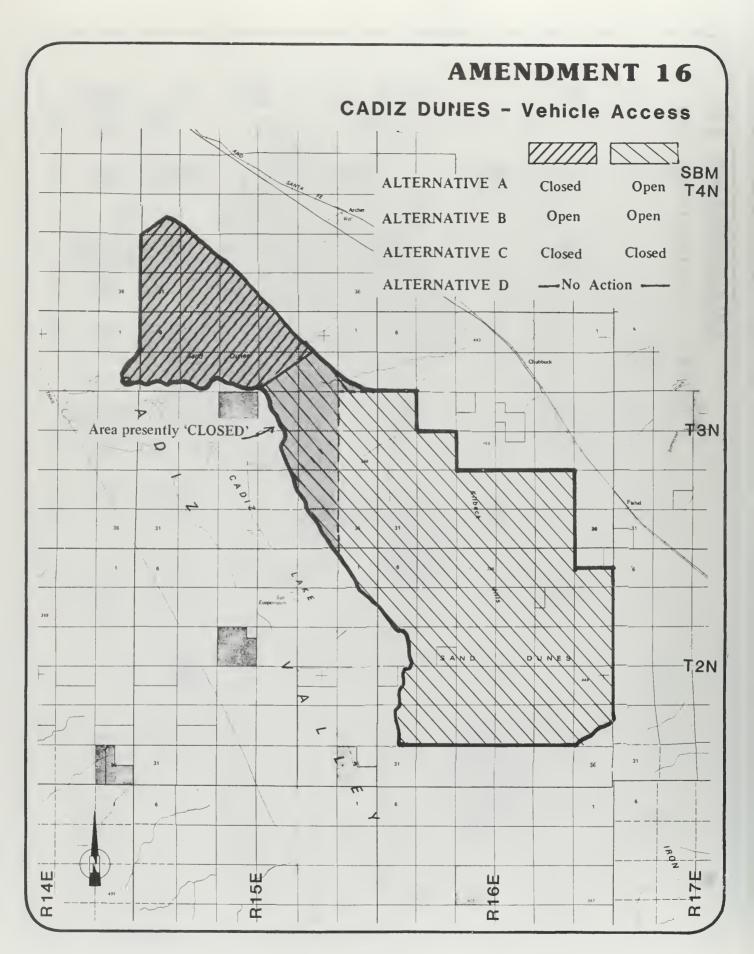




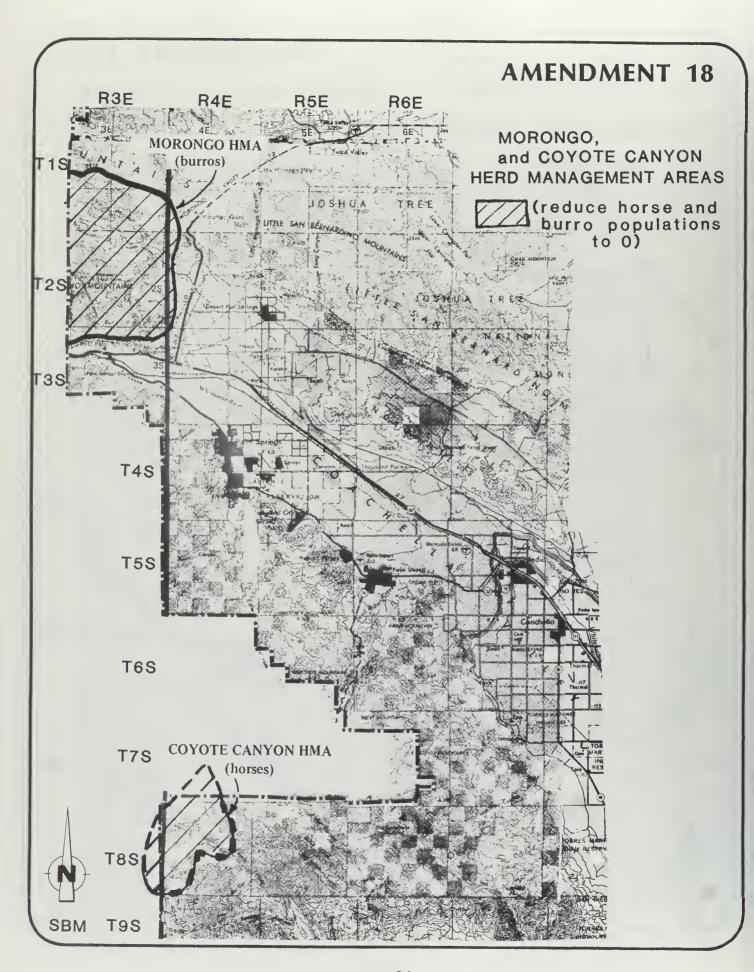


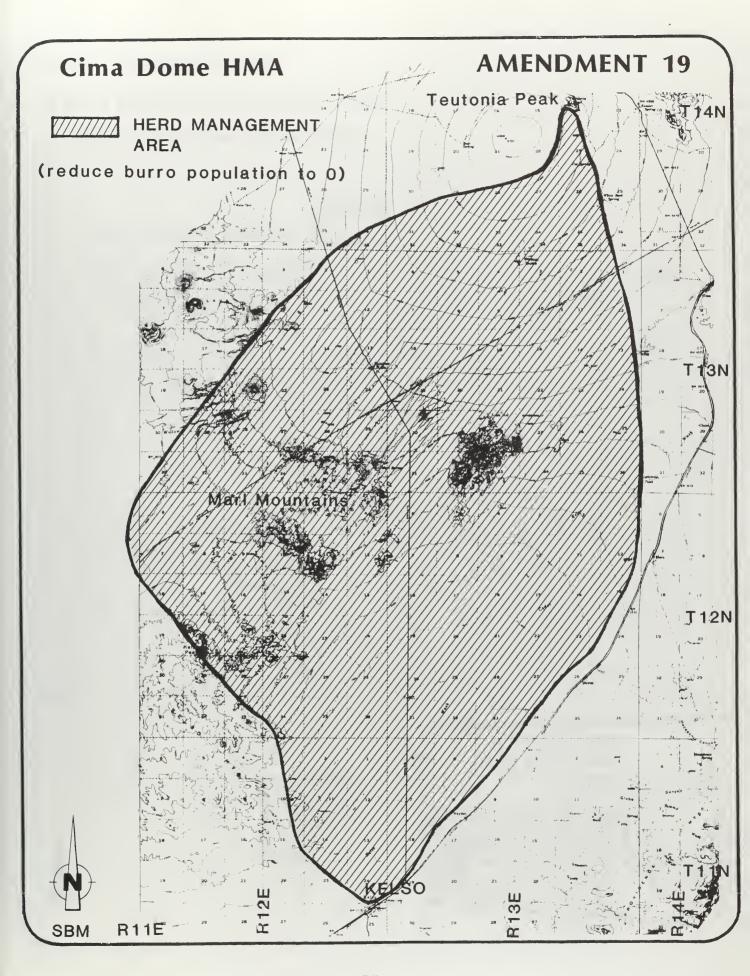






AMENDMENT 17 COLTON HILLS ALLOTMENT ALTERNATIVE A - Delete **COLTON HILLS ALLOTMENT** ALTERNATIVE B - Delete T12N T11N T10N T9N T8N SBM





AMENDMENT 20 EAST SAN DIEGO COUNTY MFP Add newly acquired lands Recently acquired land CLASS T16S Anza Borrego Desert State Park Location Site

R7E

APPENDIX B

TEXT CHANGES



CHANGE THE MULTIPLE USE CLASS GUIDELINES TO PROHIBIT AGRICULTURAL USES (EXCLUDING LIVESTOCK GRAZING) IN CLASSES M AND I. Agriculture will be permitted in "unclassified" lands. AMENDMENT TWO:

	MULTIPLE-USE CLASS C Controlled Use (Wilderness Management)	MULTIPLE-USE CLASS L Limited Use	MULTIPLE-USE CLASS M Moderate Use	MULTIPLE-USE CLASS I Intensive Use
1. AGRICULTURE	Agricultural uses (excluding livestock grazing) are not allowed	grazing) are not allowed	Agycultural uses hay be allowed on builtable land chaskied nurposes. Acobert crops, et gayyle, or others, may be allowed only after NEPA requirem been met.	n suitble land chasslied to these of the land desert crops, by the land of the

CHANGE THE MULTIPLE USE CLASS GUIDELINES ON COMMUNICATION SITES. FOR LONG DISTANCE LINE_OF_SIGHT SYSTEMS OF THREE OR MORE SITES, REQUIRE A 30-DAY PUBLIC COMMENT PERIOD ON ENVIRONMENTAL ASSESSMENTS. AMENDMENT THREE:

	MULTIPLE-USE CLASS C Controlled Use (Wilderness Management)	MULTIPLE-USE CLASS L Limited Use	MULTIPLE-USE CLASS M Moderate Use	MULTIPLE-USE CLASS I Intensive Use
8. COMMUNICATION SITES	New communication sites are not allowed unless required for protection of wilderness values or visitors	New sites may be allowed. NEPA or period is required for line-of-sight communica	New sites may be allowed. NEPA requirements will be met ADD: "A 30-day public comment period is required for environmental assessments for long distance line-of-sight communication systems of three or more sites."	A 30-day public comment nts for long distance or more sites."
	Maintenance and operation of existing sites and facilities may be allowed subject to Wilderness Management Plan.		Existing facilities may be maintained and utilized in accordance with right-of-way grants and applicable regulations	ray grants and applicable regulations

AMENDMENT FOUR:

CHANGE THE MULTIPLE USE CLASS GUIDELINES TO PROHIBIT WASTE DISPOSAL SITES (EITHER HAZARDOUS OR NON HAZARDOUS) IN CLASSES M AND I.

MULTIPLE-USE CLASS I Intensive Use	of belused for hazardous wasted is posal posal social ands.	ay not be used for waste non-hazardous). Where are found on BLM- managed iven to transfer or such to other ownership for this
MULTIPLE-USE CLASS M Moderate Use	Public lands nanaged by B. Mmay not belused for natardous wasted is where locations suitable for sound of BL M-nanaged language in the pund of BL M-nanaged language can specified my in the given to transite of such sites to other dwhership for the canada such such sites to other dwhership for the canada such such such such such such such such	"Public lands managed by BLM may not be used for waste disposal (either hazardous or non-hazardous). Where locations suitable for disposal are found on BLM- managed lands, consideration will be given to transfer or such sites through sale or exchange to other ownership for this use."
MULTIPLE-USE CLASS L Limited Use	Hazardous waste disposal sites will not be allowed. New non-hazardous waste disposal sites will not be allowed.	New Wording: ''p
MULTIPLE-USE CLASS C Controlled Use (Wilderness Management)	Waste disposal sites will not be allowed in this class	
	16. WASTE DISPOSAL	

AMENDMENT FIVE:

CHANGE MULTIPLE USE GUIDELINES FOR TRANSMISSION FACILITIES TO BETTER IDENTIFY "TRANS_DESERT TELECOMMUNICATIONS FACILITIES" AS COAXIAL AND FIBER OPTIC CABLES

	MULTIPLE-USE CLASS C	MULTIPLE-11SE CLASS I	MITTINE SOLID SOLID STATE STAT	
	Controlled Use (Wilderness Management)	Limited Use	Moderate Use	MULTIPLE-USE CLASS I Intensive Use
7. TRANSMISSION FACILITIES	New transmission facilities for electricity, gas, water, and telecommunications are not allowed and new	New gas, electric, and water transmish designated by Pro	Newgas, electric and water transmission and trans-desert telekommunications fabilities may be allowed only within designated corridors (see Energy Production and Utility Corridors Element) (NEPA) requirements will be med	s facilities may be allowed only within EPA requirements will be met
	licenses or rights-of-way for these purposes will not be granted, except as provided for in the Wilderness Act of 1964 — 16 USC 1133(d)(4), or as may be specified by Congress.	New wording: may be product will be	"New gas, electric, and water transmission facilities and cables (coaxial or fiber optic) for interstate communications may be allowed only within designated corridors (see Energy Production and Utility Corridors Element). NEPA requirements will be met."	unission facilities and interstate communications ed corridors (see Energy ement). NEPA requirements

APPENDIX C

AMENDMENTS NOT CONSIDERED



Amendment Handled Through Administrative Action

Prelim. Amend. No.	Amendment	Proponent's Reason for Submission	Remarks
85-P-4	In planning development and use of the California Desert, the Low Altitude Supersonic Jet Corridors of the Department of Defense should be recognized. (San Bernardino Co. Airport Land Use Commission).	Development needs to be limited beneath these corridors to protect the public health and safety, as well as to protect the safety of pilots.	Amendment not necessary. Barstow R.A. is coordinating with County and Dept. of Defense on proposals within these corridors.
S-4-58 C-1	Consider proposals for new amendments at five year intervals rather than annually. (Yuma Audubon - 1984).	The CDCA Plan is no longer a plan. Yearly amendments have transformed it into a reactive process whereby conflict situations are resolved with newly formulated amendment policy instead of plan guidelines. This is the same way BLM resolved conflicts before the CDCA Plan was adopted: tackle problems as they arise and formulate solutions with little or no consideration for overall future goals.	Changes in the scheduling of the amendment process may be considered later.
85-P-21	Establish a Research Natural Area (RNA) near Desert Center. (Roger A. Anderson, Biology Dept., UCLA)	The area is the site of intensive biological research and is becoming increasingly valuable for its future research potential. It needs a designation which will ensure its protection. Adjacent land is privately owned and planned for jojoba cultivation and we fear destruction and sale of this research area.	An amendment is not needed. Research in the Desert Center area can be conducted through a cooperative agreement or a memorandum of understanding between the Bureau and the applicants.
85-P-27	Delete Waucoba Spring from the Waucoba/Hunter Mountain herd management area. (Calif. Dept. Fish and Game).	This is one of the most important summer and winter deer ranges in the Inyo Mtns. Removing burros in 1981 caused an increase in forage and increased deer use in lower elevations. Complete elimination of burros from the area around the spring would allow for increased forage and deer use.	Management of burros in this area is being handled according to the Saline Valley/Lee Flat HMP. Amendment not needed.

Amendments Handled Through Administrative Action

Prelim. Amend. No.	Amendment	Proponent's Reason for Submission	Remarks
85-P-30	Develop a plan to relieve safe- ty hazards at the Buttercup Valley area of the Imperial Sand Dunes. The plan would in- clude changing the Gordon's Well Vicinity (north of the freeway) from Class I to Class L, closure of the ATV rental concessions, and establishment of a user fee which would fund adequate enforcement, a first aid treatment facility, and an interpretive safety program. (Yuma Audubon Soc.)	In the first five months of 1984, 16 deaths and hundreds of injuries occurred at the Buttercup Valley area. On weekends ATVs and dune buggies crossing I-8 make freeway travel treacherous through the dunes. In addition, the ATV concession is an encouragement to inexperienced riders to experiment with the sport of ORV vehicle play in this very dangerous environment. Our amendment would help to solve these problems.	A Recreation Activity Management Plan is under preparation for this area. It will address this situation.
85-P-32 C-5	Establish a plan for the future development of wind energy facilities in the San Gorgonio/ Whitewater River Basin region of Riverside County. (City of Desert Hot Springs).	Currently, requests for wind energy facilities are reviewed on an ad hoc basis, with no overall development plan. A comprehensive wind energy plan is needed to guide developers and planners in processing 4,000 proposed additional wind trubines.	This matter was addressed in the EIR/EIS on San Gorgonio Wind Resource Study by the BIM and Riverside County, 1982.
85-P-33	Expand the Utilities Element of the CDCA Plan to include discussion of impacts of windmill energy farms on ecology of San Gorgonio Pass and northern Coachella Valley. (Jacqueline Wolff).	Since these farms entail construction of access roads, avenues, and other manicuring around the windmills which eliminates natural ground cover and wildlife habitat, something more detailed than "close monitoring of sensitive habitats and archaeological sites" should be included in the Plan.	Same as preceding.
85-P-38	Modify the Desert Plan to protect the resources in the Big Marias. Do this in close coordination with the Yuma Dis-	The Big Maria Mountains area, stretching for a number of miles along the Colorado Basin north of Blythe, is an area of unequalled cultural, historical and spiri-	Coordination of resource protection by two Bureau offices does not require an amendment to the plan.

TABLE C-1

Amendments Handled Through Administrative Action

for Submission Remarks	e resources are amage from human These mountains alifornia Desert District and need he two agencies in cing a protection ct recently pub- 1 Resource Manage- Marias. It is District join these	rs along boundary Keeping burro herd numbers al Monument allows down and controlling the loof feral horses and cation of herds is an adminor competition for Saline Valley/Lee Flat Herd coperative manage Management Plan addressess ervice will be un- the Lee Flat Herd. Herd Herd
Proponent's Reason for Submission	tual significance. The resources are highly vulnerable to damage from human activities in the area. These mountains extend into both the California Desert District and the Yuma District and need coordination between the two agencies in implementing and enforcing a protection plan. The Yuma District recently published a draft Cultural Resource Managelished a draft Cultural Resource Managelished that the Desert District join these protective efforts.	Lack of natural barriers along boundary of Death Valley National Monument allows unrestricted movement of feral horses and burros. Fencing is too costly. Horses and burros are endangering desert bighorn sheep and mule deer by competition for forage. Cultural resources are also threatened. Without cooperative management, the Nat'l Park Service will be unable to carry out its mandate to preserve the area's natural environment.
Amendment	trict. Establishment of a joint district agency to design and implement protective measures would probably be the most effective way to carry out this important objective. (Colorado River Indian Tribes).	Eliminate feral burros as follows: Herd in Hunter Mtn. HWA should be eliminated or maintained on west side of Saline Valley and west of the Dunes. Lee Flat herd should be closely monitored for potential movement into Death Valley. This herd should be eliminated if such movement is indicated. (National Park Service).
Prelim. Amend. No.	C=3	85-P-41

TABLE C-2

Amendments Dropped

Remarks	Outside scope of Desert Plan. Board of Geographic Names has this responsibility.	Changes in wilderness suitability recommendations will not be considered until mineral surveys by the USGS and the Bureau of Mines have been completed.	Same as preceding proposal.
Proponent's Reason for Submission	To bring out the unknown is to arouse interest in this Desert.	"We believe the area has high potential for a major disseminated gold deposit. The enclosed data package provides new data supporting this belief." There are "favorable" geologic features in the area, but geochemical work is needed. "Drilling will be necessary to determine whether an ore deposit exists. It is difficult to justify the commitment of drilling funds in a Class C area where there is no reasonable assurance that a deposit, if found, can be mined."	"We believe that this area is an excellent target for a Carlin-type gold deposit and a portion of the area has extremely high antimony occurrence." "New data is presented. The area contains many adits, bulldozer cuts and trails, and several cabin sites. "Drilling will be necessary to determine whether a viable ore deposit exists. It is difficult to justify the commitment of drilling funds in a Class C area where there is no reasonable assurance that a deposit, if found, can be mined.
Amendment	We propose giving names to the many desert features (moun- tains, valleys, washes, ridges, saddles) which have no names. Names could be submitted by the public, etc. (C.F. and T.R. Linn)	Change 23 sections of WSA 119 (Little Sand Spring) from suitable to non-suitable, Class L. (Intermountain Re- sources, Inc.)	Change approximately 16.5 sections of WSA 117 (Saline Valley) from "suitable" to "nonsuitable" Class M. (Intermountain Resources, Inc.)
Prelim. Amend. No.	85-P-6	85-P-7	85-P-8

Remarks	Request would require a change in the boundary of a Wilderness Study Area, which cannot be done through a plan amendment.	This proposal has been considered before. No new data has been offered. The shape of the WSA would make managability impractical. Also, see Prelim. Amend. No. 85-P-7.	Proposed boundary line be- tween open and closed por- tions of dunes would be unen- forceable.	No classification of this type would be allowed within a wilderness area.
Proponent's Reason for Submission	This relocation would allow our slow moving vehicles to enter the State Highway at an existing access point and provide time for oncoming vehicles to safely slow down or pass. This new point would have over § mile visibility in either direction for the fast moving highway traffic.	The New York Mountains are prime wilderness. The Sierra Club leads several trips into this area. BLM rejected wilderness status for the New Yorks because of alleged commercial mineral deposits. Taxpayers would save money and BLM expenses by making the New York Mtns. a wilderness instead of processing questionable mining claims which never amount to anything.	Since adoption of the CDCA Plan in 1980, the number of mining claims in the subject area has increased from 19 to over 200. Visual quality and natural characteristics of the area have deteriorated due to grazing and mining claim activity, the latter leading to vehicle use. Class C management of the area is neither effective nor justifiable.	Area is a popular base camp for climbers, hikers, etc. Use of the region is increasing beyond natural carrying capacity. Present management does not ad-
Amendment	Relocate an access road to a gravel pit operated by the Palo Verde Irrigation District. Present access road from Highway 95 is unsafe. Request relocation to the west side of Section 27, part of which is within WSA 321. (Palo Verde Irrig. Dist.).	Change WSA 265 (New York Mountains) from non-suitable to suitable. (Jim Dodson - 1984).	Change the classification of 41% (19,200 acres) of the Kelso Dunes from recommended wilderness (Class C) to Class I (CORVA and Phantom Duck Club).	Change designation in Granite Mountains from "Class C" to "Class C - limited access." Establish a primitive camp-
Prelim. Amend. No.	85-P-9	85-P-10 C-2	85-P-11	85-P-12

	Remarks		These resources can be protected adequately without designation as an ACEC.	No new data submitted.	BLM staff has identified only one burro mule deer here. Tortoise habitat is southwest of allotment. Change in allotment boundary not warranted.
4 4	Proponent's Reason for Submission	equately protect this popular and easily accessible area. Physical improvements and sustained supervision could ameliorate this situation.	The Cima Dome joshua tree forest has no protection under BLM's CDCA Plan. By establishing an ACEC here, a management plan would exist for its protection, unlike the forests in Antelope Valley, Victor Valley, and Morongo Valley, whose joshua trees are being obliterated by urbanization.	This would acknowledge the superb view from I-15 going westward after passing through the Mountain Pass-Halloran Springs sections. Since I-15 is a well travelled road, this experience offers itself to those who ordinarily would not seek out this quality of the desert. Visual integrity should be maintained.	Domestic sheep within the present allotment boundaries are in direct competition with burro mule deer which migrate here in the summer. The allotment borders one of the four highly crucial desert tortoise populations. The boundary line separating the desert tortoise habitat and the domestic sheep grazing allotment is unfenced. Sheep may stray into the crucial tortoise area and compete for forage.
	Amendment	ground to include water, trash receptacles, pit toilets, and designated/controlled camp spaces/vehicular access. (Pat-rick Kelly - 1984).	Establish ACEC for Cima Dome Joshua tree forest. The Cima Dome is the world's largest and densest Joshua tree (yucca brevifolia) forest. (Ecol. Center of Southern Calif 1984).	Extend northern boundary of the East Mojave National Scenic Area to include northern half of Shadow Valley (Jacqueline Wolff).	Change the Ford Dry Lake Livestock Allotment boundary to exclude domestic livestock grazling south of I-10 freeway, and expand boundary in suitable areas north of I-10 to compensate for area excluded south of freeway. The expanded boundary should extend no closer than one mile to perimeter of the Palen and McCoy Mountains. (Calif. Dept. Fish and Game).
	Amend. No.		85-P-18	85-P-20	85-P-23

### ### ##############################	Prelim. Amend. No.	Amendment	Proponent's Reason for Submission	Remarks
We recommend that Julian Wash be retained as an access corri- provides important access for recreation- dor into WSA 355, or else that the WSA be divided into two wSAs, one north and one south of Julian Wash. (Calif. Dept. would result in degradation of the WSA. Fish and Game). Change all unclassified lands within the Last Chance Archaeland, ical District is of either controlled or limited classification. Classifying these remaining areas MUCL would make the area more homogeneous for management.	85-P-24	Modify grazing allotment boundaries to exclude cattle from that portion of the Inyo Mtns. extending northeast of Deep Springs Valley. (Calif. Dept. Fish and Game).	Water developments for cattle, which we understand were not authorized by BIM, have recently enabled grazing in this region, which is used by a moderate number of deer in winter and spring. The Dept. of Fish and Game has identified this range as a suitable site for the reestablishment of desert bighorn sheep. The current level of cattle use will conflict with both deer management and the introduction of bighorn sheep.	Allotment Management Plan will be prepared for the allotment in this area. Meanwhile BLM will be coordina ting with Calif. Fish and Game on cattle management and reintroduction of bighorn sheep. Amendment not necessary.
Change all unclassified lands Except for a small amount of private within the Last Chance Archae- land, all of the land in the Archaeolog- ological District to Class L. ical District is of either controlled or (BLM, Ridgecrest RA) limited classification. Classifying these remaining areas MUCL would make the area more homogeneous for management.	85-P-31	We recommend that Julian Wash be retained as an access corridor into WSA 355, or else that the WSA be divided into two WSAs, one north and one south of Julian Wash. (Calif. Dept. Fish and Game).	WSA 355 is bisected by Julian Wash, which provides important access for recreation—lists, hunters, and other valid uses of the public domain. We do not believe that retention of this vehicle corridor would result in degradation of the WSA.	Wilderness suitability re- commendations will not be changed until mineral surveys are complete. WSA boundaries cannot be changed by a plan amendment. WSA 355 is being managed according to Interim Management Policy and access along Julian Wash will con- tinue.
	85-P-42	Change all unclassified lands within the Last Chance Archae- ological District to Class L. (BLM, Ridgecrest RA)	Except for a small amount of private land, all of the land in the Archaeological District is of either controlled or limited classification. Classifying these remaining areas MUCL would make the area more homogeneous for management.	Final decision for CDCA Plan stated that the sphere of influence of the city of Ridgecrest should be designated unclassified to allow for urban expansion. This area does not include the Last Chance Archaeological District. Therefore, an amendment is not needed.

Remarks	Please see remarks for Pro- posal 85-P-7.
Proponent's Reason for Submission	This would bring southern boundary into Please see remarks for Proline with that of the recommended wilder- posal 85-P-7. ness in Bakersfield District.
Amendment	Move the southern boundary of Class C portion of WSA 122 (Inyo Mountains north to follow Craig Canyon). Change MUC to Class L or M. (Johnny Johnson)
Prelim. Amend. No.	85-P-44

Table C-3
Sources of Amendments Accepted for Consideration in 1985

Finəl Amend. No.		Title	Droponont
10.	No.	TICTE	Proponent
1. a. b.	85-P-1	BLM/Navy Cooperative Agreement West Mesa East Mesa	U.S. Navy
2.	85-P-2	Change MUC Guidelines for Agriculture	BLM
3.	85-P-3	Change MUC Guidelines for Communication Sites	BLM
4.	85-P-43	Change MUC Guidelines for Waste Disposal	BLM
5.	85-P-34	Clarify MUC Guidelines for Transmission Facilities	BLM
6.	85-P-35	Restate Goals for Plan Elements	BLM
7.	85-P-36,37	Reclassify Lands in Baker area and Adjust Boundary of EMNSA	BIM, Barstow RA
8.	85-P-13	Change Sect. 10, T 4S, R 6E from Unclassified to Class L	CA Fish & Game
9.	85-P-14	Change Fringe-Toed Lizard Habitat in Coachella Valley from Unclassi- fied to Class L	CA Fish & Game
10.	85-P - 15	Reclassify Non-Wilderness Study Areas in Panamints (PU. 25) from MUC L to MUC M	Mərgərethə Krucker
11.	85-P-39	Change Area South of Johnson Valley Open Area from MUC I to MUC M	BLM, Barstow RA
12.	85-P-40	Change Small Tract Area in Johnson Valley from MUC L to Unclassified	BLM, Barstow RA
13. a. b. c. d.	85-P-16 85-P-16a 85-P-16b 85-P-16c 85-P-16d	Modify ACEC boundaries Clark Mountain (No. 19) Yuha Basin (No. 64) Gold Basin/Rand Intaglio (No. 67) Plank Road (No. 72)	BIM, Needles RA BIM, El Centro RA BIM, El Centro RA BIM, El Centro RA

Table C-3
Sources of Amendments Accepted for Consideration in 1985

Final Amend	d. Amend.	Title	Proponent
14.	85-P-17	New ACEC at Warm Sulfur Springs	CA Fish & Game
15.	85-P-19	Change unclassified land to MUC L in East Mojave Natl. Scenic Area	Peter Burk
16.	85 - P-29	Open Part of Cadiz Dunes to Motorized Vehicles	Associated Blazers of CA
17.	85-P-25	Delete Portion of Colton Hills Grazing Allotment South of I-40	CA Fish & Game
18.	85 - P - 26	Reduce Wild Horse or Burro Popu- lation to zero in Morongo and Coyote Canyon HMAs.	BLM, Barstow and Indio RA
19.	85-P-28	Reduce Burro Population to zero in Cima Dome HMA	Gary Overson
		Eastern San Diego County MFP	
20.	85-P-22	Incroporate newly acquired lands into the East San Diego County MFP and designate them Class L.	BLM, El Centro RA

APPENDIX D

PROPOSED REVISIONS TO DESERT
PLAN GOAL STATEMENTS



SUPPLEMENTAL INFORMATION-

PROPOSED REVISIONS TO DESERT PLAN GOAL STATEMENTS

Cultural and Paleontological Resource Element

Cultural Resources

- 1. Broaden the archaeological and historical knowledge of the CDCA through continuing inventory efforts and the use of existing data. Continue the effort to identify the full array of the CDCA's cultural resources.
- 2. Preserve and protect a representative sample of the full array of the CDCA's cultural resource.
- 3. Ensure that cultural resources are given full consideration in land use planning and management decisions, and ensure that BLM authorized actions avoid inadvertent impacts.
- 4. Ensure proper data recovery of significant (National Register quality) cultural resources where adverse impacts cannot be avoided.

Paleontological Resources

- 1. Ensure that paleontological resources are given full consideration in land use planning and in management decisions.
- 2. Preserve and protect a representative sample of the full array of the CDCA's paleontological resources.
- 3. Ensure proper data recovery of significant paleontological resources where adverse impacts cannot be avoided or otherwise mitigated.

Native American Element

- 1. As an ongoing process, identify Native American values through regular contact and consultation with tribal entities and/or individuals, consistent with policy.
- 2. Give full consideration to Native American values in land use planning and management decisions, consistent with statute, regulation and policy.
- 3. Manage and protect Native American values wherever prudent and feasible.

Wildlife Element

1. Reduce impacts on general wildlife populations and habitats through avoidance or mitigation of impacts from conflicting activities; and promote general wildlife populations through habitat enhancement projects such that balanced ecosystems are maintained and wildlife abundance provides for human enjoyment.

- 2. Provide special management consideration through the development and implementation of detailed plans for (a) areas which contain rare or unique habitat, (b) areas with habitat which is sensitive to conflicting uses, (c) areas with habitat which is especially rich in wildlife abundance or diversity, and (d) areas which are good representatives of common habitat types. Many areas falling into these categories contain listed species, which may become the focus of management as indicator species.
- 3. Manage those wildlife species on the Federal and State lists of threatened and endangered species and their habitats so that the continued existence of each is not jeopardized. Stabilize and, where possible, improve populations through management and recovery plans developed and implemented cooperatively with the U.S. Fish and Wildlife Service and the California Department of Fish and Game.
- 4. Manage those wildlife species officially designated as sensitive by the BLM for California and their habitats so that the potential for Federal or State listing is minimized. Include consideration of sensitive species crucial habitats in all decisions such that impacts are avoided, mitigated, or compensated.

Vegetation Element

- 1. Maintain the productivity of the vegetative resource while meeting the consumptive needs of wildlife, livestock, wild horses and burros, and man. Provide for such uses under the principles of sustained yield.
- 2. Manage those plant species on the Federal and State lists of threatened and endangered species and their habitits so that the continued existence of each is not jeopardized. Stabilize and, where possible, improve populations through management and recovery plans developed and implemented cooperatively with the U.S. Fish and Wildlife Service and the California Department of Fish and Game.
- 3. Manage those plant species officially designated as sensitive by the BLM for California and their habitats so that the potential for Federal or State listing is minimized. Include consideration of sensitive species habitits in all decisions such that impacts are avoided, mitigated, or compensated.
- 4. Manage unusual plant assemblages (UPA's)² so that their continued existence is maintained. In all actions, include consideration of UPA's through avoidance, mitigation, or compensation.

^{1.} In order to promote the conservation of species as intended by the Endangered Species Act, the Bureau designates certain species of concern as "sensitive."

^{2.} An Unusual Plant Assemblage is a stand of vegetation which is extraordinary due to size, age, rarity, disjunction from other stands of the same type, or high cover or density.

5. Accomplish other resources objectives by altering plant composition, density, and/or cover. Objectives include eliminating harmful or noxious plants, increasing livestock or wildlife forage production, and improving wildlife habitat characteristics. Diversified, native plant communities are favored over monocultures or communities based on non-native species.

Wilderness Element

- 1. Until Congressional release or designation as Wilderness, provide protection of wilderness values so that those values are not degraded so far as to significantly constrain the recommendation with respect to an area's suitability or nonsuitability for preservation as wilderness.
- 2. Provide a wilderness system possessing a variety of opportunities for primitive and unconfined types of recreation, involving a diversity of ecosystems and landforms, geographically distributed throughout the Desert.
- 3. Manage a wilderness system in an unimpaired state, preserving wilderness values and primitive recreation opportunities, while providing for acceptable use.

Wild Horse and Burro Element

- Provide year-long feed, cover and water requirements for wild horses and burros within specified areas. Feed and water requirements will be satisfied by reserving and developing sufficient forage and water to maintain biological demands for a specific number of animals. Cover or living area will be provided and preserved through Herd Management Area Plans.
- 2. Protect wild horses and burros on public lands by conducting surveillance to prevent unauthorized removal or undue harassment of animals.
- 3. Remove all wild horses and burros from areas not designated for retention and excess wild horses and burros from designated retention areas.

Livestock Grazing Element

- Maintain good and excellent range condition and improve poor and fair range condition by one condition class, through development and implementation of feasible grazing systems or allotment management plans. Adjust livestock use where monitoring data indicate changes are necessary to meet resource objectives.
- 2. Use range management as a tool to alter and/or improve vegetation to attain livestock use and other resource goals while satisfying the need for food and fiber from the California Desert.

Recreation Element

- Provide for a wide range of quality recreation opportunities and experiences emphasizing dispersed undeveloped use.
- 2. Provide a minimum of recreation facilities with emphasis on resource protection and visitor safety.
- 3. Manage recreation use to minimize user conflicts, provide a safe recreating environment, and protect important desert resources.
- 4. Emphasize the use of public information and education techniques to increase public awareness, enjoyment, and sensitive of desert resources.
- 5. Adjust management approach as appropriate to accommodate changing visitor use patterns and preferences.

Motorized-Vehicle Access Element

- 1. Provide for constrained Motorized vehicle access in a manner that balances the needs of all desert users, private landowners and other public agencies.
- 2. When designating or amending areas or routes for motorized vehicle access, to the degree possible, avoid adverse impacts to desert resources.
- 3. Use maps, signs and published information to communicate the motorized vehicle access situation to desert users. Be sure all information materials are understandable and easy to follow.

Geology, Energy and Mineral Resources Element

- 1. Assure the availability of known mineral resource lands for mineral exploration and development.
- 2. Foster and encourage orderly and economic development of mineral resources.
- 3. Assure mineral resource input to planning, recognizing concurrent or sequential use.
- 4. Develop a mineral resource inventory, GEM database, and professional, technical and managerial staff knowledgable in mineral exploration and development.
- 5. Manage mineral lease and material sale operations to insure conservation of mineral resources, verification of production, diligent development, compliance with approved plans, and receipt of fair market value.

Energy Production and Utility Corridors Element

- 1. Fully implement the joint-use corridor systems provided for in the plan, capable of accommodating utility needs to the year 2000.
- 2. Identify consistent Desert-wide environmental constraints and siting procedures that telecommunications firms and public agencies can use to guide their planning of both individual communications sites and line-of-site communications systems.
- 3. Identify potential sites for geothermal development, wind energy parks, and powerplant locations.

Land-Tenure Adjustment Element

- 1. Establish a land tenure program that complements the goals of other Desert Plan elements through the consolidation of public lands within special management areas, such as ACECs intensive use recreation areas and multiple use Class C areas.
- 2. Initiate a program for the conveyance of public land through sale and exchange within the "Unclassified" areas of the CDCA to reduce inefficient management of isolated and fragmented parcels.
- 3. Provide through sale, exchange and the transfer via the Recreation and Public Purposes Act, public lands to meet the needs of other governmental jurisdictions for public facilities such as parks, recreation areas, refuse disposal sites.
- 4. Cooperate with other public agencies at all levels to insure that locally adopted land use plans are considered in any land tenure action.



APPENDIX E

COOPERATIVE AGREEMENT

BETWEEN

DEPARTMENT OF THE NAVY

AND

BUREAU OF RECLAMATION

AND

BUREAU OF LAND MANAGEMENT



COOPERATIVE AGREEMENT

- I. PURPOSE
- II. AUTHORITY
- III. DEFINITIONS
- IV. CURRENT OPERATIONAL REQUIREMENTS
 - A. NAVY
 - 1. RSZ "A"
 - 2. RSZ "B"
 - 3. RSZ "C"
 - B. BLM
 - C. Existing MOAs, PLO, and Guidelines
 - V. NAVY-BLM AGREEMENT OBJECTIVES
 - A. RSZ "A"
 - B. RSZ "B"
 - C. RSZ "C"
- VI. NAVY-BLM OPERATIONS
 - A. General Resource Management
 - B. Recreation Management (RSZ "B" and "C")
 - C. Signing and Posting
 - D. Lands and Realty Program Management
 - 1. Withdrawals
 - 2. Rights-of-Ways and Cooperative Agreement
 - 3. Disposal of Land
 - 4. Acquisition of Lands or Easements
 - E. Minerals Management
 - 1. Locatable Minerals
 - Oil and Gas Pre-Lease, Leasing and Post Lease Operations (RSZ "A")
 - Oil and Gas Leasing and Post Lease Operations (RSZ "B" and "C")
 - 4. Oil and Gas Geophysical Operations Vibrosis, etc.
 - 5. Geothermal Pre-Lease, Leasing, and Post Lease Stage
 - 6. Geothermal Geophysical Operations
 - 7. Saleable Minerals

VII. PUBLIC SAFETY

- A. Range Safety Zones
 - 1. RSZ "A"
 - 2. RSZ "B"
 - 3. RSZ "C"
 - 4. Air Space

VIII. FACILITY PROTECTION

- A. Range Safety Zones
 1. RSZ "A"
 2. RSZ "B" and "C"
- COOPERATIVE AGREEMENT IMPLEMENTATION IX.
- Χ. NAVY-BLM INTERIM MANAGEMENT
- XI. APPROVAL

I. PURPOSE

This Cooperative Agreement assigns responsibility and coordination of federal land uses in Imperial County, California that are presently being managed by the Bureau of Land Management (BLM) and Bureau of Reclamation (BUREC). Existing Department of the Navy (NAVY) uses are recognized and provided for by Range Safety Zones (RSZ) and subsequent stipulations and reservations in the RSZ. This Cooperative Agreement between BLM, NAVY and BUREC will have a term of twenty (20) years from the date of execution of this agreement.

II. AUTHORITY

- A. Bureau of Land Management
 - The Federal Land Policy and Management Act of 1976 (FLPMA), P.L. 94-579, 90 Stat. 2766, 43 U.S.C. 1737.
- B. Bureau of Reclamation
 - 1. The Reclamation Act of 1902, 43 U.S.C. Chapter 12, as amended and supplemented.
- C. Department of the Navy
 - 1. 10 U.S.C. 2233
 - 2. The Engle Act of 28 February 1958, 43 U.S.C. 155-158.

III. DEFINITIONS

- A. <u>District Manager</u>: means the Bureau of Land Management's District Manager, California Desert District, Riverside, California.
- B. Area Manager: means the Bureau of Land Management's Area Manager, El Centro Resource Area, El Centro, California.
- C. <u>Project Manager</u>: means the Bureau of Reclamation's Project Manager, Yuma Project Office, Yuma, Arizona.
- D. <u>Commanding Officer:</u> means the Commanding Officer of the Naval Air Facility, El Centro, California.
- E. Withdrawal: means withholding an area of federal land from settlement, sales, location, or entry under some or all of the general land laws for the purpose of limiting activities under those laws or transferring jurisdiction over an area of federal land to another government agency. (See 43 CFR 2300).

- F. Right-of-Way: means the public lands authorized to be used or occupied pursuant to Title V of FLPMA (specifically Sec. 507) authorizing and granting use of federal lands to any department or agency of the United States for specified purposes. (See 43 CFR 2807).
- G. RSZ: means Range Safety Zones which prioritize relative hazard risks and safety requirements with respect to noise, drop hazard, and aircraft accident potential.
- H. Aerial Weapon Training Ranges, (R-2510 and R-2512): means designated military airspace within which the flight of aircraft while not wholly prohibited, is subject to restrictions.
- I. <u>Concurrence</u>: means review and approval by Commanding Officer prior to granting a variance on normally incompatible land use requests to determine public safety.
- J. Desert Plan: means the comprehensive plan prepared for the California Desert Conservation Area, required by FLPMA, Section 601(d) (43 U.S.C. 1781).

IV. CURRENT OPERATIONAL REQUIREMENTS

A. NAVY

- 1. RSZ "A"- Required surface impact target areas, which are areas of extreme hazard and subject to possible impact from dropped ordnance. Operations conducted in these areas pose a great potential threat to ground surface activities, and are highly susceptible to aircraft crash.
- 2. RSZ "B"- Designated areas subject to significant overflight conditions where jet aircraft are operating in an armed mode. Arming refers to the in-flight procedure of disengaging the aircraft safety latch mechanism in preparation for ordnance release at the target. While ordnance concussion does not normally occur in this area, an occasional inadvertent drop is possible due to an electrical short, air turbulance or other unexpected occurrence.

Within the "B" area aircraft are flying at low levels and traveling at speeds in excess of 500 knots, which severely limits the range of possible ground surface activities.

In areas close to the target, a noise hazard also exists with possible peak sound pressure levels of over 100 db (A). It can be expected that the Community Noise Equivalent Level (CNEL) for the areas could be in excess of 80db. Special speech communication systems may be necessary as well as the use of protective means to reduce the risks of hearing damage.

The "B" area is the area over which pre- and post-drop maneuvers must be conducted, i.e., dives, pop-ups, etc. Special attention must be given toward eliminating ground activities which could be of a distracting or disorienting nature.

This area is also an area with a greater chance of aircraft mishaps or accidents due to the aircraft weapons systems being armed.

3. RSZ "C" - The "C" area is intended to provide an adequate area of protected space in which military training exercises can be safely conducted without interference from general aviation traffic. There are also height and population density concerns which will need to be controlled. Considering the altitude of the aircraft and the type of maneuver the aircraft is likely to be engaged in, less danger exists to surface activities in this area although certain activities must be restricted.

B. BLM

Congress enacted the Federal Land Policy and Management Act of 1976 (FLPMA) which directed the BLM to complete a comprehensive land use plan. Completed in 1980 as the California Desert Conservation Area (CDCA) plan, it has resolved many conflicting uses of public land resources and established a framework of multiple use and sustained yield of all resources as defined in Section 103 of FLPMA.

Other laws providing management authority for these public lands according to multiple use and sustained yield include the following:

- 1. U.S. Mining Laws
- 2. Taylor Grazing Act of 1934
- 3. Wilderness Act of 1964
- 4. Historic Preservation Act of 1966
- 5. U.S. Mineral Leasing Laws
- 6. Mining and Minerals Policy Act of 1978
- 7. Wild and Free-Roaming Horse and Burro Act of 1971
- 8. Edangered Species Act of 1973
- 9. Sikes Act of 1974

10. Public Range and Improvement Act of 1978

- 11. National Environmental Policy Act (NEPA) of 1969
- 12. Antiquities Act of 1906
- 13. Clean Air Act as amended
- 14. Resource Conservation and Recovery Act of 1976

15. E. O. 11514 Environmental Quality

- 16. E. O. 11593 Protection of Cultural Resources
- 17. E. O. 11752 Environmental Quality at Federal Facilities

18. E. O. 11988 Floodplain Management

19. E. O. 11644 and 11989 Off-Road Vehicle Management, issued 1972 and 1977, respectively

C. Existing Memorandum of Agreements (MOAs), Public Land Order (PLO) and Guidelines

Existing MOAs and PLO currently relevant to these lands include:

- 1. Bureau of Reclamation U. S. Navy, 1966
- 2. Bureau of Reclamation U. S. Navy, 1969
- 3. Bureau of Reclamation U. S. Navy, 1973
- 4. Bureau of Land Management U. S. Navy, 1973
- 5. Bureau of Land Management U. S. Navy (P.L.O. 4880), 1978
- 6. Bureau of Reclamation U. S. Navy, 1983

General land use guidelines exist that underlie the operation of the CDCA plan. These include:

- 1. Valid Existing Rights all actions taken will be subject to valid existing rights.
- 2. Impact Assessment actions may require preparation of an environmental impact assessment.
- 3. Uses, Permits and Authorization laws and regulations governing authorizations are included in Titles 30, 36, and 43 of Code of Federal Regulations or determined by BLM policy guidance.
- 4. Health, Safety, and General Welfare temporary and emergency related uses of the public lands for protecting the health, safety and general welfare are expected. These include:
 - a. repairs and maintenance of public utility and communication facilities, public roads, and highways
 - b. search and rescue operations
 - c. fire prevention and/or suppression
 - d. law enforcement activities
 - e. other activities of an urgent temporary nature

While this agreement among the three (3) agencies presumes each has a role, its general purpose is to put in place a basic agreement between BLM and NAVY to take effect immediately. BUREC's withdrawal remains in effect until revoked, relinquished or reaffirmed. The purpose of this agreement is to have a land use system in place to substitute for BUREC's withdrawal. Should BUREC's withdrawal not be revoked or relinquished, the locatable mineral portion of this agreement cannot be implemented.

V. NAVY-BLM AGREEMENT OBJECTIVES

A. RSZ "A" - NAVY will withdraw these target areas and retain exclusive control, including the land use and height restrictions listed below in R-2510 and R-2512. The target boundaries and height restrictions are shown on the attached maps marked Exhibits "A" through "C".

R-2510 (West Mesa)

- a. All land uses will be prohibited. Scheduled events for off-road vehicle use as described in Article VI(B) 4 may be conducted on a not to interfere basis. These events are to be coordinated with, and approved by, the Commanding Officer.
- b. Height restriction is 0 (zero) feet as shown on Exhibit "C".

Containing 38,608.89 acres, more or less.

R-2512 (East Mesa)

- a. All land uses will be prohibited.
- b. Height restriction is O (zero) feet as shown on Exhibit "C".

Containing 15,969.25 acres, more or less.

B. RSZ "B" - NAVY will apply for a Right-of-Way in these areas with overall management responsibilities retained by BLM and BUREC, while recognizing all incompatible uses required by the NAVY. These incompatible uses and height restrictions are listed below in R-2510 and R-2512. Boundaries and height restrictions are shown on the attached maps marked Exhibits "A" through "C".

R-2510 (West Mesa)

- a. Prohibited land uses include:
 - (1) Heavy agriculture (e.g., feed lots, dairies).
 - (2) Residential (e.g., single family, 1 unit/40 acres).
 - (3) Public and Quasi-Public Facilities (e.g., schools and churches).
 - (4) Commercial-retail, wholesale, professional.

(5) Utility corridors, overhead power or gas lines except as specifically authorized elsewhere in this agreement.

Items 1 through 4 above, are activities which do not occur on public lands. As described in Article VI (D) 2, existing utility lines are acceptable and new utility lines within planned corridors are acceptable on a case-by-case basis, subject to mitigation, and BLM designated corridors N (a designated utility corridor for future power and/or pipeline development) and Z (a 92 KV power line for transmitting energy from geothermal and possible solar generators) are hereby recognized.

- b. Possible incompatible land uses as follows may be granted permission subject to the concurrence of the Commanding Officer on a case-by-case basis:
 - (1) Energy resources extraction/development.

(2) Mining.

- (3) Outdoor recreation for off road vehicle use except as specifically authorized elsewhere in this agreement.
- (4) New proposed roads, structures, etc.
- (5) Light agriculture (e.g., crop farming).

Items I through 4 above are normally provided for on public lands. Such uses may still be allowed, subject to appropriate mitigation and as noted elsewhere in this agreement. Item 5 is not consistent with public land utilization.

c. Height restriction is 20 feet as shown on Exhibit "C".

Containing 63,509.31 acres, more or less.

R-2512 (East Mesa)

a. The same land uses and height restrictions listed above under R-2510 (West Mesa) apply here.

As described in Article VI (D) 2, existing utility lines are acceptable and new utility lines within planned corridors are acceptable on a case-by-case basis, subject to mitigation, and BLM designated corridors M (a designated utility corridor for future power and/or

pipeline development), T (a 12 inch pipeline as an alternative to Z and improved with existing electric transmission facilities)and CC (1/500 KV power line requested by San Diego Gas and Electric Company as a possible alternative for their Arizona Interconnection Project from Yuma to the San Diego Area) are hereby recognized.

b. The area in the RSZ "C" zone lying north of Highway 78 between Target 95 RSZ "A" and Target 68 RSZ "B" between the East Highline and Coachella Canals will have the same land use restrictions as in the RSZ "B" with the exception that the 20 feet height restriction will be increased to 30 to 40 feet as shown on Exhibit "C".

Containing 10,454.21 acres, more or less.

C. <u>RSZ "C"</u>

This area will be managed by BLM under this Cooperative Agreement. Possession and management will be retained by BLM and BUREC while recognizing potential conflicting uses required by the NAVY. These potential conflicting land uses and Navy's required height restrictions are listed below in R-2510 and R-2512. Boundaries and height restrictions are shown on the attached maps marked Exhibits "A" through "C".

R-2510 (West Mesa)

- a. Prohibited land use:
 - (1) Public and Quasi-Public Facilities (e.g., schools and churches). These uses are not made on public lands.
- b. Potentially conflicting land uses, as follows, may be granted permission subject to the concurrence of the Commanding Officer on a case-by-case basis:
 - (1) Heavy agriculture (e.g., feed lots, dairies).
 - (2) Commercial-retail, wholesale, professional.
 - (3) Utility corridors, overhead power or gas lines except as specifically authorized elsewhere in this agreement.

Items 1 and 2 are not generally done on public lands.

c. Height restriction is from 30 to 200 feet as shown on Exhibit "C".

R-2512 (East Mesa)

a. The same land use and height restrictions listed above under R-2510 (West Mesa) apply here.

VI. NAVY-BLM Operations

A. General Resource Management

Laws and policies defined herein will be applied for management within RSZ "A", "B", and "C" for uses that include but are not limited to wildlife habitat, cultural resources, historic values, vegetative resources, environmental quality and wilderness resources. These factors will be considered on actions associated with public land uses which may be under consideration. Specific allowable land uses within these areas covered by this Agreement, such as recreation, minerals, and utility corridors are covered in detailed sections below. (Paragraphs B, D and E.)

Where BLM and NAVY agree on the response to a land use request in RSZ "B" and "C" areas, but the applicant disagrees, BLM will issue a decision reflecting the position of the United States. The applicant shall have the appropriate appeal process available under the Administrative Procedures Act which is the normal procedure for such applications under public land laws and regulations.

If the Commanding Officer and the Area Manager do not agree on the response to an application for land use in RSZ "B" and "C" areas, a resolution will be made by higher authority of both agencies. Authorization will be withheld by BLM pending an agreement between the agencies.

In those cases where an appeal is filed BLM agrees to keep NAVY informed so that appropriate NAVY representation may be made.

Both BLM and NAVY recognize the need for public information and awareness regarding safety zones, permissible activities, and proper access.

B. Recreation Management (RSZ "B" and "C")

1. BLM retains overall recreation management responsibility within RSZ "B" and "C" areas. BLM will enforce above land use restrictions and closely coordinate with the NAVY in the development of recreation management plans and proposals for the area, and will obtain NAVY concurrence in RSZ "A" and "B" areas before approving such plans or proposals.

- 2. Public access via Imler and Huff Roads will be eliminated through Target 101 of RSZ "A" in R-2510. NAVY will coordinate with BLM and the County of Imperial to provide alternate access.
- 3. Public access to the "Rockhouse" area on the south side of Superstition Mountain which passes through RSZ "A" in R-2510 will be eliminated. NAVY will coordinate with BLM and the County of Imperial to provide alternate access from Wheeler Road. Recreation activity will be authorized in the Superstition Mountain area as shown on Exhibit "D". The San Felipe Corridor is designated open to transiting vehicle traffic as shown on Exhibit "D".
- 4. Competitive events may be scheduled in the R-2510 RSZ "A", "B" and "C" areas with the following stipulations pertaining to the joint use of public lands for commercial, competitive, or other types of recreational events when authorized by "Special Recreation Permit".
 - a. BLM and NAVY will each designate a competitive event coordinator and furnish to the other the name and address of the person so designated.
 - b. It is agreed that at least 12 events per year will be allowed to take place either totally or partially within the R-2510 RSZ "A" and "B" areas. In any calendar month, at least one event will be allowed.
 - c. The BLM will have a representative present at each event to help ensure compliance with the terms of the Special Recreation Permit.
 - d. BLM will issue Special Recreation Permits for off-road events only within areas mutually agreed upon by the NAVY and BLM as being suitable for this purpose. The withdrawn area is available for use on a case-by-case basis, provided the event does not conflict with planned NAVY activities within the R-2510. BLM will notify the NAVY at least 30 days before an event is proposed for the RSZ "A" and "B" areas as to the exact nature of the proposal. NAVY will respond to BLM within two (2) weeks after receipt of BLM's notification. BLM will notify the Commanding Officer in advance of a scheduled competitive event in the RSZ "C" area.
 - e. The collection and deposition of fees by BLM for Special Recreation Permits shall be made in accordance with the existing BLM regulations.
 - f. Prospective competitive event sponsors apply for and are assigned event dates and locations through a lottery conducted by the BLM each August. By September 1, the BLM will furnish the NAVY a proposed schedule of events to be held within the R-2510 area during the upcoming calendar

year, as determined by the lottery. The NAVY will notify the BLM as soon as possible of any scheduling conflicts with planned NAVY activities, and the event will be rescheduled to a date satisfactory to the BLM, the NAVY, and the event sponsor. If no response is received from the NAVY by December 1, the BLM will assume that the schedule poses no conflict, and will begin issuing Special Recreation Permits for the individual events. As permits are issued, the BLM will provide the NAVY a copy of its letter to the permittee along with the course map.

- Sponsors occasionally make late application for events after g. the lottery has been held. The NAVY will allow the BLM to issue permits for off-road events on any weekend not already booked through the lottery, provided the BLM notifies the NAVY of the event application at least thirty (30) days prior to the proposed event date. The permit for such an event will contain a provision that the use is subject to postponement or cancellation by NAVY anytime prior to 1:00 p.m. Friday immediately prior to the weekend permitted. NAVY will inform both BLM and the event sponsor of the need to postpone or cancel any event so scheduled at the earliest possible time. The special provision in the permit will also require the event sponsor to contact NAVY at 1:00 p.m. Friday, if no prior notification has been received, to confirm the availability of the land.
- h. BLM will require as a stipulation to all Special Recreation Permits issued that the event sponsor will have comprehensive liability insurance in favor of the United States of America.
- i. Notwithstanding any other provisions, NAVY reserves the right to cancel and prohibit public access to the R-2510 RSZ "A" and "B" areas at anytime without prior notice for any or all of the following:
 - (1) Temporary difficulty encountered in removal/recovery of test items if the exposure of such items to the general public might incur compromise of classified and/or national security information.
 - (2) A national emergency or disaster.
 - (3) A priority assignment to utilize the area for any test which could pose a substantial personnel or equipment hazard to anyone entering on or within the area on an uncontrolled basis.
- 5. General recreation use in the Imperial Sand Dunes, R-2512 (East Mesa), lying east of the Coachella Canal including access and campground developments currently existing are acknowledged and are hereby deemed compatible with the general standards associated with the RSZ "C" area and will require no change in

operations. Organized events in the area will not require close coordination as required on the R-2510 (West Mesa) since the Canal provides a clear line for public awareness, and uses will not extend into RSZ "B".

C. Signing and Posting

NAVY responsibilities for posting the area include sign production, installation, maintenance, and replacement.

- 1. NAVY will post signs for the withdrawn target areas (RSZ "A") and the Right-of-Way areas (RSZ "B") in a manner sufficient to inform the general public of:
 - a. Safety hazards resulting from authorized NAVY operations;
 - Access restrictions resulting from authorized NAVY operations;
 - c. All other restrictions, programs, or regulatory actions resulting from authorized NAVY operations.
- 2. BLM will be responsible for posting, maintaining, and replacing all recreation management signs not relating to authorized NAVY operations in the Right-of-Way and Cooperative Agreement (RSZ "B" and "C") areas.

D. Lands and Realty Program Management

1. Withdrawals

NAVY shall make an appropriate filing for withdrawal of the target areas shown on Exhibits "A" and "B" as RSZ "A" or modifications thereof. These areas will be managed solely by the NAVY.

Appropriate NEPA documentation will be determined through further BLM and NAVY coordination, including amendment of the Desert Plan.

The parties to this Cooperative Agreement agree that once signed by all parties, the agreement will be made a part of the Desert Plan.

BLM shall also amend the Desert Plan to reflect its land use classes on the area of R-2510 (West Mesa) currently under BUREC withdrawal which was excluded from the final Desert Plan approved in 1980.

2. Rights-of-Ways and Cooperative Agreement

NAVY shall make an appropriate filing with BLM for a right-of-way covering the area shown as RSZ "B" on Exhibits "A" and "B". BLM will retain jurisdiction; however, no other

rights-of-way, leases, or permits contrary to this agreement will be granted without NAVY concurrence.

It is agreed that BLM has the sole right to grant rights-of-way, leases, or permits within the areas RSZ "B" and "C". BLM will contact the NAVY for their concurrence on the adequacy of protective stipulations to be included in the granting documents within these areas before any such rights or privileges are granted. NAVY shall respond in writing within two (2) weeks of receipt of the initial request for their concurrence. A non-response will be confirmed. Initial BLM request will be sent by Certified Mail - Return Receipt Requested to the Commanding Officer, and copy to the Western Division, Naval Facilities Engineering Command (Code 24), P. O. Box 727, San Bruno, CA 94066-0720. Any disagreements, either between NAVY and BLM, or between the applicant and the United States shall be handled as indicated in Section VI A above.

BLM shall have primary responsibility for monitoring authorized uses to insure compliance. NAVY will report any sightings of suspected non-compliance to BLM.

It is agreed that existing utilities and/or rights-of-way within RSZ "B" and "C" areas may remain without modification or movement. Warning balls and lights will be required by NAVY for pilot safety and to reduce hazard created by the power lines when the existing utilities are modified or new ones installed that will penetrate the height limits as shown on Exhibit "C". The cost of such installation would be borne by the utility company. A request for proposed modifications and/or new installations exceeding the established heights will be subject to the concurrence of the Commanding Officer.

It is further agreed that installation of new proposed power lines in the following corridors identified in the CDCA plan will be subject to the concurrence by the Commanding Officer on a case-by-case basis:

- a. Corridor M, paralleling the East Highline Canal (R-2512 East Mesa), will require warning balls and/or lights in the RSZ "B" and "C" zones where the constructed height exceeds the height restrictions listed in Article V of this agreement as recommended by the Commanding Officer.
- b. Contingent Corridor T (P. 189, Appendix Volume G of the CDCA plan) paralleling the Southern Pacific Railroad North of Glamis, is authorized not to exceed 100 feet in height except where height restrictions have higher limits.
- c. Corridor N is a designated utility corridor containing an existing San Diego Gas and Electric Company 500 KV line. Although the corridor is located outside of the proposed boundaries of R-2510 (West Mesa) covered by this agreement, additional lines, if proposed in the corridor, will not exceed the as built height of the existing line.

d. Contingent Corridor Z is a 92KV power line for transmitting energy from geothermal and possible solar generators paralleling the Salton Sea. Although the corridor is located outside the proposed boundaries of R-2510 (West Mesa) covered by this agreement, the constructed height cannot exceed the height restrictions listed in Article V of this agreement as recommended by the Commanding Officer and extreme caution is to be taken if any vapor plumes could exist.

3. Disposal of Land

It is agreed that the public interest requires retention of public lands within RSZ "B" and "C" areas in public ownership. Unless otherwise provided for by law, disposals will not generally be made unless they are clearly in the public interest and concurred in by both parties.

Current disposals of public lands now being processed may continue (i.e., all lands north of Highway 78 in T.11 and 12S., R.9 and 10E.) for the Ocotillo Wells State Recreation Vehicle Area. Acquisition by the California Department of Parks and Recreation may be processed at such time as the State applies.

4. Acquisition of Lands or Easements

Additional lands or easements will be necessary for multiple use management. Where defined by land use plans, these acquisitions will be coordinated with the NAVY in RSZ "B" and "C". The San Felipe corridor easement acquisition will continue after alignment is mapped and will be hereby designated as open for use on the designated route. Additional corridor access through RSZ "B" will be subject to the concurrence of the Commanding Officer. Land Acquisition within the San Sebastian Marsh will continue after coordination.

E. Minerals Management

1. Locatable Minerals

- a. RSZ "A" Pursuant to the withdrawal these areas are not available to locatable mineral exploration or development.
- b. RSZ "B" and "C" Pursuant to the current withdrawal by BUREC, these lands are not available to locatable mineral exploration or development. At such time as the BUREC withdrawal is revoked or terminated, or on lands not now under withdrawal, the lands shall be open to location. All actions shall be regulated under 43 CFR 3802 and 43 CFR 3809, as applicable. Plan of operations will be required which will reflect hazards associated with NAVY use of airspace and height restrictions which may be imposed as well as other limitations on surface uses near target areas.

On receipt of plans of operation BLM will contact NAVY for their concurrence. Notification, review, response and appeals shall be handled in the same manner and time frames as indicated in Section VI A and D 2 above.

Pursuant to Section 601 (f) of FLPMA stipulations attached to mining plans of operations may be carried over to any mineral patents issued.

2. Oil and Gas Pre-Lease, Leasing and Post Lease Operations (RSZ "A")

Oil and gas leasing requests will be processed in accordance with procedures established by the Memorandum of Understanding for the Onshore Oil and Gas and Geothermal Program between the Department of Defense and the Department of the Interior of January 1984. A leasing request prior to leasing will require the review, recommendations, and leasing stipulations from the Commanding Officer through his chain of command. The final approval or rejection of a request will be made by the Director, Installations and Facilities under the Secretary of the Navy. Depending on the complexity of the issues, the final review decision may take as long as six months, more or less.

BLM will remain the lead agency for leasing and will provide the NAVY with copies of leases and pertinent documents after receipt of a favorable decision from the Director, Installations and Facilities. In the event of a negative decision, the Director, Installations and Facilities will provide full justification for denial of the lease application.

Monitoring after lease issuance shall be the responsibility of BLM. Normally the BLM is responsible for shut down of non-complying operations; however, the Commanding Officer may shut down an operation in emergencies and immediately notify BLM.

3. Oil and Gas Leasing and Post Lease Operations (RSZ "B" and "C")

The Commanding Officer may notify BLM of any observed non-compliance or unsafe or emergency situation which may require BLM to shut down or restrict operations.

Oil and gas leasing applications and post lease operations will be handled by BLM in accordance with normal procedures except that NAVY will be consulted and appropriate height and use restrictions may apply.

4. Oil and Gas Geophysical Operations - Vibrosis, etc.

In RSZ "A" NAVY is the sole authorizer if any such use is allowed.

BLM is lead agency in RSZ "B" and "C". Since only a notice of intent need be filed no review time can be afforded NAVY, but the Area Manager will notify the Commanding Officer and will include appropriate warnings and stipulations in confirmation to operators. BLM will monitor operator. The Commanding Officer will notify BLM immediately when incidents of noncompliance are observed. The Commanding Officer may not shut down operator but will contact BLM and request such action.

5. Geothermal Pre-Lease, Leasing, and Post Lease Stage

Same as for oil and gas.

6. Geothermal Operations

Pre-Lease Operations:

Same as with geophysical for oil and gas, except that a two (2) week review period will be afforded the Commanding Officer prior to BLM approving permits.

Lease Issuance and Post Lease Operations:

The Commanding Officer may impose leasing stipulations such as height and steam vapor restrictions at certain time periods which are reasonable to BLM with input allowed from lessee.

7. Saleable Minerals

Mineral materials, e.g., sand and gravel, may be sold from all lands, although generally not from areas in RSZ "A" due to extreme hazards.

Upon receipt of an application, BLM and NAVY will meet with the operator to discuss proposed operation and possible restrictions within three (3) weeks.

BLM will remain the lead agency for the sale of material and provide the Commanding Officer with copies of the contracts and pertinent documents.

Monitoring will be the responsibility of BLM who may shut down or restrict the operator at the request of the Commanding Officer.

VII. PUBLIC SAFETY

A. Range Safety Zones

1. RSZ "A"

The Commanding Officer is the sole responsible agent of the federal government for the public safety in these areas. Public safety and law enforcement will be the responsibility of the NAYY.

2. RSZ "B"

The District Manager in cooperation with the Commanding Officer will provide for public safety in this area. As part of the CDCA plan amendments, BLM and NAVY will prepare operational plans as part of this agreement to increase public safety.

3. RSZ "C"

The District Manager is the responsible agent for public safety in this area. Appropriate coordination and pre-planning for safety requirements with the Commanding Officer will occur.

4. AIR SPACE

The NAVY will suspend flight operations upon a showing of need for air space clearance for emergency operations such as Search and Rescue. Generally this will be on request through the Federal Aviation Administration (FAA) or appropriate law enforcement organizations.

VIII. FACILITY PROTECTION

A. Range Safety Zones

1. RSZ "A"

The Commanding Officer is the sole responsible agent of the federal government for the operation, maintenance, and utilization of the target complexes. The location of each is identified as RSZ "A" and shown on Exhibits "A" and "B".

The Commanding Officer is responsible for the protection of the health and safety of all personnel (military and civilian) within the boundaries of the target complex, and for the continuing preservation of each target complex to perform its mission of air warfare training, desert survival training, desert warfare training, and parachute research, development and training.

2. RSZ "B" and "C"

The District Manager and the user are the responsible agents of the Federal Government for the multiple use and sustain yield management of the federal lands in this area. Appropriate coordination and pre-planning of land use with the Commanding Officer will occur.

IX. COOPERATIVE AGREEMENT IMPLEMENTATION

- A. NAVY will submit the appropriate applications to BLM pursuant to this agreement.
- B. BLM will prepare CDCA plan amendments as necessary, beginning in 1985, to be linked with any environmental document required as part of any application. The amendment(s) to the CDCA plan will address, at a minimum, areas to be added to or deleted from the jurisdiction of the CDCA as a result of this agreement. NAVY will reimburse BLM for the work of preparing, publishing and completing appropriate environmental documentation.

X. NAVY-BLM INTERIM MANAGEMENT

Pending completion of those points defined in the Implementation Section of this agreement (Section IX, A and B), the following will take effect immediately with the signing of this document.

- A. The stipulations and conditions as agreed upon herein will take effect on those RSZs within the BLM-BUREC-NAVY lease area not covered by the CDCA plan.
- B. The stipulations and conditions as agreed upon herein will take effect concurrent to finalizing CDCA plan amendments or other decision documents prepared to realize the preferred, compatible uses of RSZ "A", "B", and "C" where they occur on federal lands.
- C. The complete and thorough coordination with the Imperial County Board of Supervisors, other county, state and federal agencies, and other public land users as required.
- D. All pre-application agreements of Section IX. A.



APPENDIX F

PUBLIC NOTIFICATION LETTER ON NAVY/BLM

COOPERATIVE AGREEMENT





REFERTO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

El Centro Resource Area 333 South Waterman Avenue El Centro, California 92243

8100 (C-067.29 Native American

JUL. 3 1985

Dear Public Land User:

The Bureau of Land Management and Department of Navy plan to enter into agreements which will alter land use classification in parts of Imperial County. The two areas in question occur in the vicinity of Superstition Mountain on West Mesa and on either side of Highway 78, between the agricultural lands and Imperial Sand Dunes (see attached maps). Specific targets within both areas have long been used for bombing practice. The West Mesa area has also been a focal point for desert motorcycle racing during the past ten years.

The proposal currently being evaluated by the Bureau involves the withdrawal of lands around individual targets by the Navy. This will ensure continued security for the safe operation of aircraft. Another aspect of the proposal will assign BLM land use classifications to lands currently unclassified and under Navy lease (see attached maps).

The new classifications will, in large part, recognize existing land use patterns. Class I (Intense) lands occur southwest of the Superstition Mountains and largely correspond to areas used for motorcycle racing. This area is proposed for open vehicle free play. Class M (Moderate) will limit vehicle use to existing roads and trails. Finally, Class L (Limited) corresponds to an area that the Navy will apply for rights-of-way agreements in order to monitor development. Only designated routes of travel will be available for vehicle use

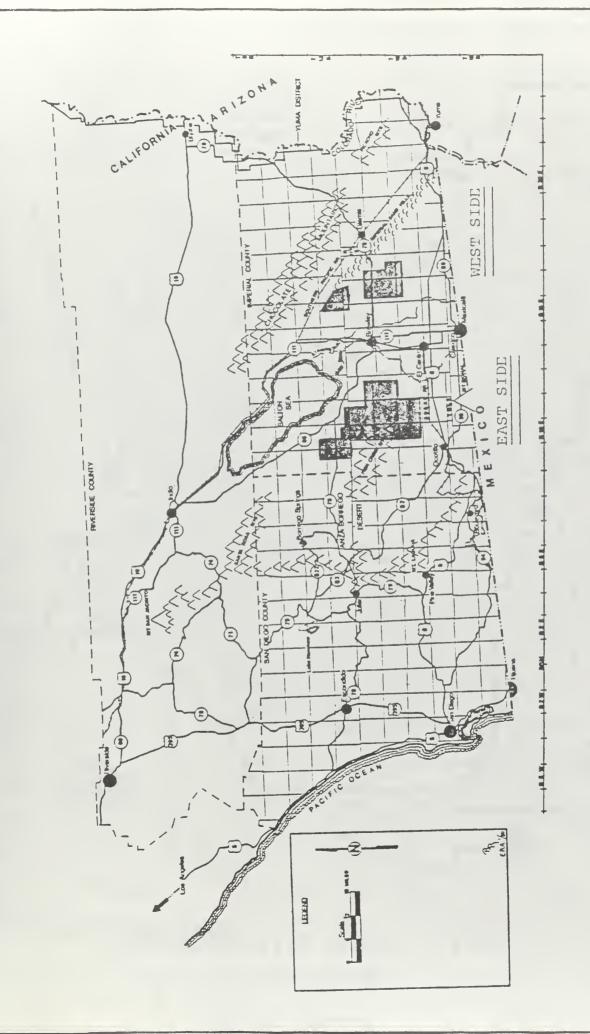
Native American values of concerns will constitute one topic in the Environmental Impact Statement being prepared by the El Centro Resource Area. Please feel free to express any of your concerns regarding the potential impact this proposal may have upon traditional heritage values. Maps of both East and West Mesa are enclosed for your use. We urge you to mark on the maps the general location of important areas or sacred sites, if any, for our consideration.

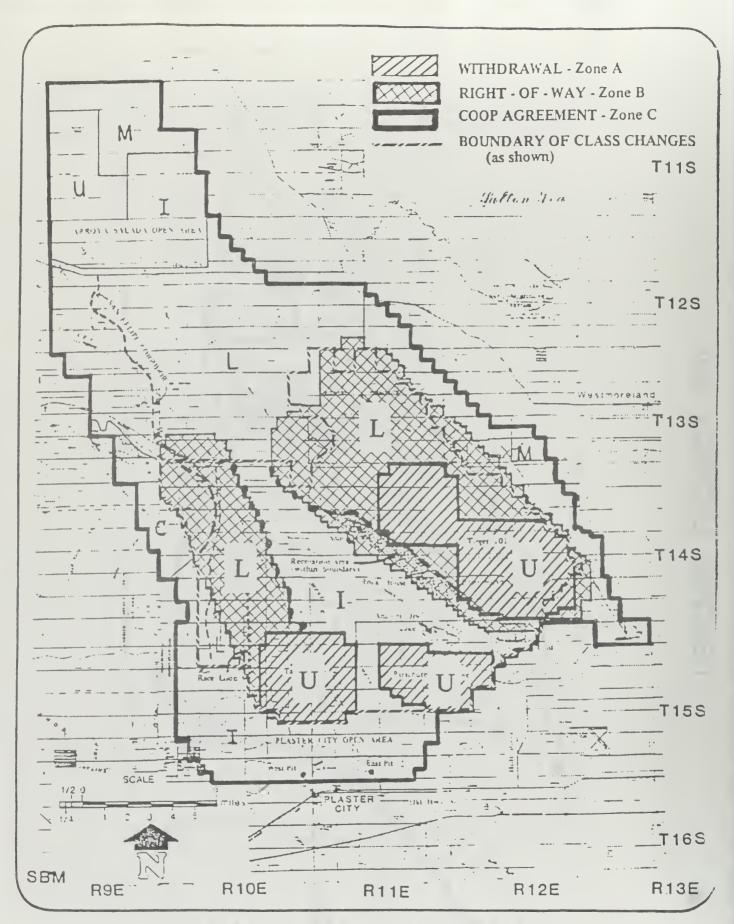
Please express your concerns prior to July 30, 1985. If you would like a field visit to either area, then contact Pat Welch at (619) 352-5842. Feel free to contact me for more specific information on the proposal.

Sincerely,

Roger/D. Zortman

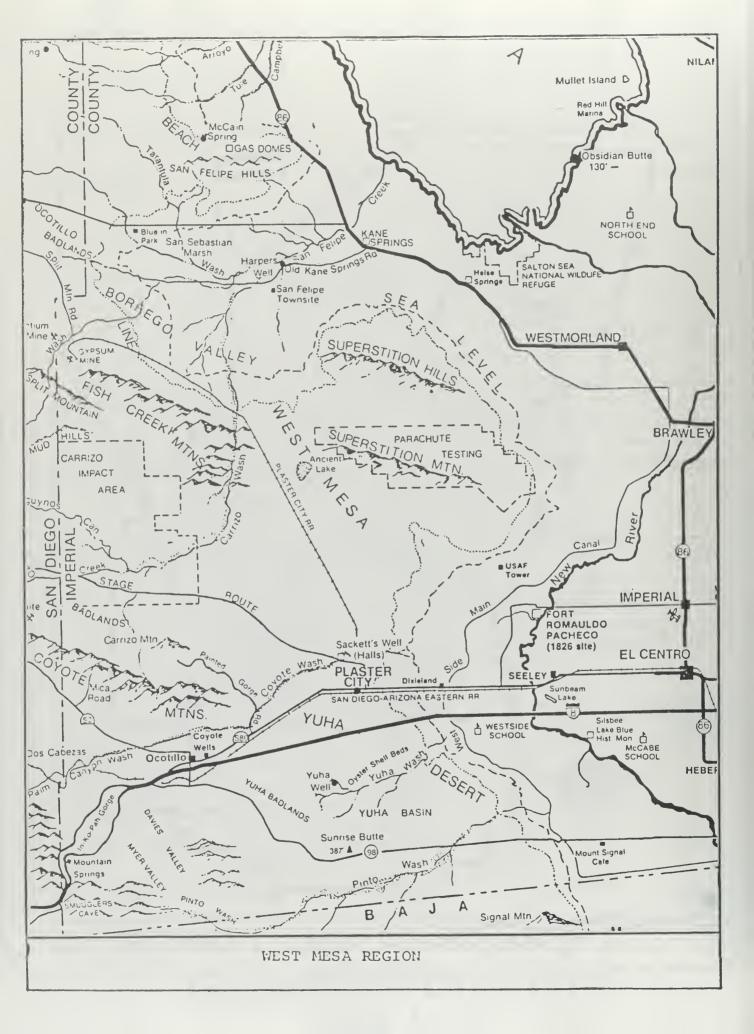
Area Manager

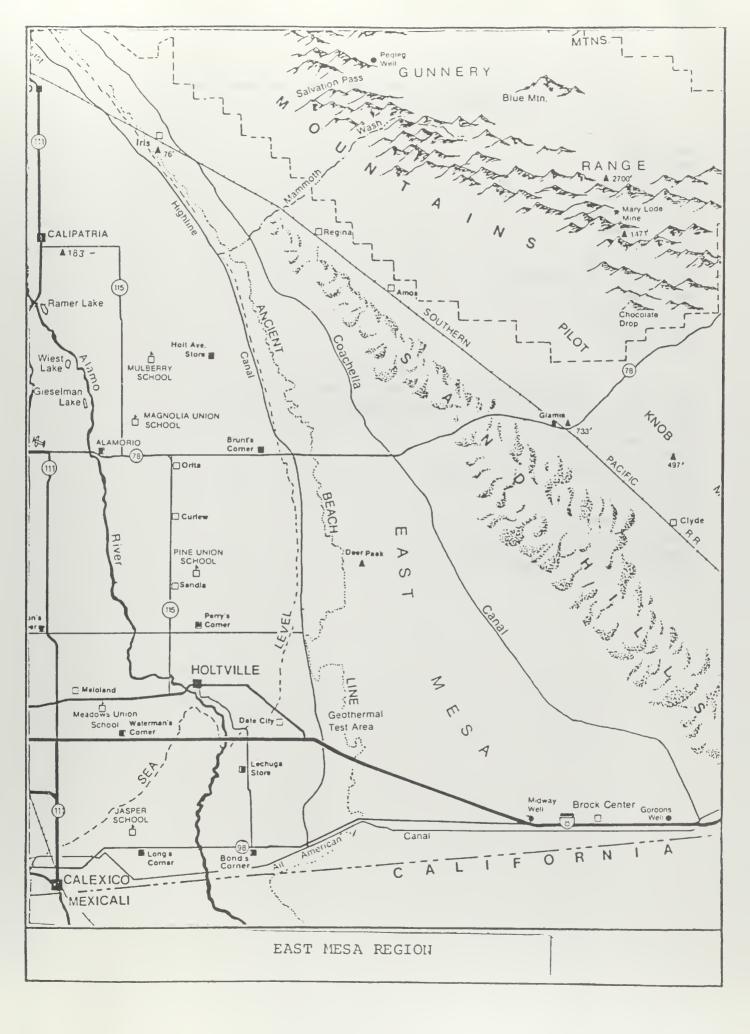




NAVY LAND WITHDRAWAL West Mesa

NAVY LAND WITHDRAWAL East Mesa





List of Individuals, Reservations, and Agencies Receiving Withdrawal Notification Letter

Lowell Bean
Vera Brown
Bill Coleman
Dennis Dutton
Steve Esquibel
King Freeman
George Hyde
Virginia Landis
Katherine & Raymond Lobo
Tom Lucas
Florence Shipek
Fern Southcott
Clyde Woods

Pam Arviso - Southern California Tribal Charman's Association
Paul Beck - Native American Hertiage Commission
Weldon Johnson - CRIT
Elvin Kelly - Fort Yuma
Kumeyaay Historical Society
Susie Parel-Duranceau - Fort Yuma
Anthony Pico - Viejas
Tony Pinto - Cuipipe
Gwendolyn Sevella - La Posta
Francis Shaw - Manzanita
Bunning Taylor - Los Coyotes
Valacia Thacker - Campo

APPENDIX G

CULTURAL RESOURCES/NATIVE AMERICAN VALUES



APPEDIX G

CULTURAL RESOURCES/NATIVE AMERICAN VALUES

BLM'S LEGAL RESPONSIBILITIES

The laws and manuals which state the Bureau's responsibilities for protecting cultural resources and which provide guidance to the Bureau for Native American contact and for management of their concerns are outlined below.

CULTURAL RESOURCES

The responsibility of Federal agencies to protect cultural resources is described in detail within 36 CFR 800. These regulations implement the National Historic Preservation Act of 1966 (PL 89-665). In short, agencies must "take into account" the affect of their undertakings upon cultural resources considered eligible for inclusion on the National Register of Historic Places. Furthermore, agencies must provide the Advisory Council on Historic Preservation an opportunity to comment on the proposed undertaking and adequacy of consideration afforded to cultural resources.

Additional legislation which guides Federal land managers in their role of preserving the nation's cultural heritage includes the Archaeological Resources Protection Act (PL 96-95) and Executive Order 11593. The Bureau policy of cultural resource management is contained within the 8100 manual. Finally, the California Desert District has entered into a Programmatic Memorandum of Agreement with the Advisory Council and State Historic Preservation Office (SHPO) to ensure compliance with 36 CFR 800 requirements.

Archaeolocial significance can be simply defined. The threshold of significance hinges on whether a property is considered eligible or potentially eligible for inclusion on the National Register. Sites considered eligible are, by definition, significant.

NATIVE AMERICAN VALUES

The Bureau's Native American contact procedure is well established as policy (USDI, BIM Manual 8111, 8100 Supplement) and identified in regulations (43 CFR 7.701) which implement the Archaeological Resources Protection Act of 1979. Additional Federal legislation exists regarding the consideration and protection of Native American values. The National Historic Preservation Act of 1966 states that:

"Cultural foundations of the Nation should be preserved as a living part of our community life...The preservation of this irreplaceable heritage is in the public interest so that its vital legacy...will be maintained and enriched for furture generations of Americans" (PL 89-665,1966).

The American Indian Religious Freedom Joint Resolution is quite specific. In part it concludes that:

"It shall be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercize the traditional religions of the American Indian." (PL 95-341).

These manuals and laws provide the Bureau with guidance for Native American contact and management of their concerns.

EFFECTS OF VEHICLE ACCESS IN MULTIPLE USE CLASSES ON CULTURAL RESOURCES

The vehicular uses which are allowed in the multiple use classes and their potential effect on cultural resources are described below.

MULTIPLE USE CLASS I (OPEN AREAS)

Unlimited vehicular access is allowed, with no restrictions on vehicular operation, motorcycle racing, pit location, or camping. Cultural resource values can be expected to suffer extreme damage.

MULTIPLE USE CLASS M (MODERATE)

Vehicular access is allowed on existing routes. Motorcycle pits and races are permitted. Camping is allowed within 300 feet of existing routes, and vehicular access is permitted to the proposed campsite.

This class can result in cumulative impacts to archaeological sites and result in decreased preservation.

MULTIPLE USE CLASS L (LIMITED)

Vehicle use is restricted to approved routes of travel. However, the lengthy route of travel approval process must be completed before approved routes are designated. Thus, Class L areas become defacto Class M areas until routes are designated and implemented. Route approval, signing, and enforcement in Class L areas can protect and limit impacts to cultural resources.

Motorcycle racing is permitted on approved routes only. No pitting is permitted within Class L areas, according to the Desert Plan. As with the Class M designation, camping is permitted within 300 feet of approved routes. These limits tend to place Class L lands in a slightly more protected administrative environment than Class M.

MULTIPLE USE CLASS C (CLOSED)

Class C is the most restrictive land use category in the Desert Plan and provides the greatest protection for cultural resources. Vehicle access is largely prohibited unless provided for in individual management plans. Other forms of development are also largely curtailed.

UNCLASSIFIED LANDS

The Bureau retains no management over vehicle use in unclassified lands unless agreement is reached between BLM and the other agency.

APPENDIX H

BLM POLICY FOR PROTECTING WILDLIFE AND VEGETATIVE
SPECIES OF SPECIAL SIGNIFICANCE



APPENDIX H

BLM POLICY FOR PROTECTING WILDLIFE AND VEGETATIVE SPECIES OF SPECIAL SIGNIFICANCE

WILDLIFE

BLM is mandated by BLM Manual 6840 to "improve populations and habitats" of ... animals which are candidates for listing, proposed listed, or officially listed by the Federal government as being in potential danger of extinction (ie., threatened of endangered) to a point at which protection under the Endangered Species Act is no longer proposed or necessary." Authorities for Manual 6840 include the Endangered Species Act of 1973 (16 U.S.C., 1531 et seq.) as amended; the Sikes Act, Title II (16 U.S.C., 670 et seq.); NEPA (42 U.S.C., 4321 et seq.) as amended; FLPMA (43 U.S.C. 1701); and Department Manual 235.1.1.A.

BLM is mandated by BLM Manual 6840.2 to "conserve ... animals which are offically listed by the State of California as being in potential danger of extinction." Authorities include the ESA, FLPMA, Sikes Act, California Species Preservation Act of 1970 (Fish & Game Code Sections 900-903, 2050-2055), BLM CA State Office Instruction Memo CA-83-49, and the BLM/California Dept. of Fish and Game Master Memorandum of Understanding.

Certain species are designated as "Sensitive Species" by BLM. BLM is directed "to manage the public lands so as to prevent deterioration of sensitive species' habitat, thereby precluding the need for State or Federal listing" (CSO IM CA-82-190).

VEGETATION

BLM policy in California requires that listed plant species receive the following protection:

- 1. Federal candidate species are fully protected under the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C., 1531 et seq.) (USDI, 1984).
- 2. State listed species are protected by the Bureau, in coordination with the California Department of Fish and Game, with the goal of conserving the species, promoting its delisting and enhancing or maintaining its habitat (USDI, 1984).
- 3. Plants listed by the California Native Plant Society (CNPS) receive special consideration according to their relative rarity, endangerment and distribution (USDI, 1979a,b).

The CNPS ranks each plant with a three letter code, as described below. Four categories of plants are listed:

List 1 - Plants rare and endangered in California and elsewhere List 2 - Plants rare or endangered in California, but more common elsewhere

List 3 - Plants about which we need more information List 4 - Plants of limited distribution (a watch list) Each sensitive plant is described in terms of rarity, endangerment, and distribution. The following definition of these terms and their use was taken from the CNP's "Inventory of Rare and Endangered Vascular Plants of California" (Smith, 1984):

Rarity addresses the extent of the plant, both in terms of numbers of individuals and the nature and extent of distribution;

Endangerment embodies the perception of the plant's being threatened with extinction, for whatever reason; and

Distribution focuses on the general range of the plant.

Together these three elements form the R-E-D Code. Each element in the code is divided into three classes or degrees of concern, represented by the number 1, 2, or 3. In each case, the higher the number the more critical is the concern. The system is summarized as follows:

R (Rarity)

- 1. Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
- 2. Occurrence confined to several populations or to one extended population.
- 3. Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

E (Endangerment)

- 1. Not endangered
- 2. Endangered in portion of its range
- 3. Endangered throughout its range

D (Distribution)

- 1. More or less widespread outside California
- 2. Rare outside California
- 3. Endemic to California

A R-E-D Code of 3-3-3 indicates that the plant in question is limited to one population or a few restricted ones, that it is endangered throughout its range, and that it is endemic to California.

Table H-l Significant Flora Suspected to Occur in Study Area

Plant	Found in Study Area						
West Mesa							
Ammobroma sonorae Astragalus crotalanae Astragalus insularis var. harwoodii	CNPS List 1, RED 2-2-2 CNPS List 4, RED 1-1-2 CNPS List 2, RED 2-2-1	X X					
Astragalus lentiginosus var. borreganus	CNPS List 4, RED 1-1-1						
Astragalus magdalenae var. peirsonii Croton wigginsii	USFWS- candidate; Calif endangered CNPS List 1, RED 3-2-2 Calif threatened; CNPS List 2, RED 2-2-1	X					
Eucnide rupestris Ferocactus acanthodus var. acanthodes	CNPS List 2, RED 3-2-1 USFWS - candidate; CNPS List 3, RED ?-3-2						
Lycium parishii Lyrocarpa coulter ssp. palmeri	CNPS List 2, RED 2-1-1 CNPS List 2, RED 1-1-1						
Malpena tenuis Mentzelia hirsutissima ssp. stenophylla	CNPS List 2, RED 3-1-1 CNPS List 2, RED 2-1-1						
Opuntia wigginsii	USFWS - candidate; CNPS List 1, RED 2-1-2	Х					
Pilostyles thurberi Xylorhiza orcuttii	CNPS List 2, RED 1-1-1 USFWS - candidate; CNPS List 1, RED 2-1-2	Х					
<u>East Mesa</u>							
Ammobroma sonorae Astragalus lentiginosus ssp. borreganus	CNPS List 1, RED 2-2-2 CNPS List 4, RED 1-1-1	X X					
Astragalus magdalenae var. peirsonii Calliandra eriophylla	USFWS - candidate Calif endangered CNPS List 1, RED 3-2-2 CNPS List 2, RED 3-1-1	X					
Croton wigginsii	Calif Threatened CNPS List 2, RED 2-2-1	Х					
Cryptantha costata Ditaxis californica	CNPS List 4, RED 1-1-2 USFWS - candidate CNPS List 1, RED 2-2-3	Х					
Helianthus niveus ssp. (tephrodes)	USFWS - candidate, Calif endangered CNPS List 1, RED 3-2-2	X					
Lyrocarpa coulter ssp. (palmeri)	CNPS List 2, RED 1-1-1	X					
Palafoxia avida var. gigantea	USFWS - candidate, CNPS List 4, RED 1-1-2	Х					
Pilostyles thurberi	CNPS List 2, RED 1-1-1						



APPENDIX I

SUPERSTITION MOUNTAIN OPEN AREA



APPENDIX I

SUPERSTITION MOUNTAIN OPEN AREA

DESCRIPTION OF MAXIMUM AREA CONSIDERED

The area of consideration is a 50,700 Ac block of public lands located 25 miles northwest of El Centro in south - central Imperial County. Primary access is from the south via Huff Road and from the east via Imler Road. The boundaries of the maximum area considered correspond to those of the West Mesa lands proposed for MUC I under Alternative C (See Map 9). This encompasses the entire Navy Lease area from Superstition Mountain south to the boundary of the Plaster City Open Area (Map 7), excluding RSZ A lands except for a small parcel on the north side of Superstition Mountain. The area is crossed by the U.S. Gypsum Company Railroad between Plaster City and the Fish Creek Mountains, and by numerous other roads and ORV trails.

The terrain is flat to rolling to steep and mountainous, with several intermittent streambeds, dry washes and small sand dune systems. The elevation varies from a low of 40 feet below sea level near Wheeler Road on the area's eastern border to 759 feet at the summit of Superstition Mountain.

At present 7,220 acres are in private ownership with the remainder under some form of Federal management, principally a Bureau of Reclamation withdrawal leased to the Navy and a small acreage under BLM management. The Imperial County General Plan classifies most of the area as "Special Public" (which accomodates military and compatible recreational uses) with a small area on the east side near Wheeler road classified for "Recreation."

Table I-l summarizes the characteristics of sensitivity and suitability for this area, determined during the preparation of EIS.

The analysis of the proposed Superstition Mountain Open Area utilizes the process and criteria described in Appendix V of the Final EIS and Proposed Plan for the CDCA, 1980, pp 81-83.

SENSITIVE RESOURCE VALUES

Sensitive resources are described in Chapter III, Affected Environment, in the discussion on the West Side of the study area.

SITE VALUES CONSIDERED

TERRAIN DIVERSITY

The area varies from flat with little relief to dissected, arroyo-cut landscape, to sand dune areas, to the steep slopes of Superstition Mountain, which are covered in many areas with massive dunes of windblown sand. The area exhibits outstanding terrain diversity overall, with a wide variety of challenging vehicle opportunities.

ACCESSIBILITY

Huff and Imler Roads provide convenient access from the south and east.

FIGURE I-1

Evaluation of Characteristics of Superstition Mountian Open Area

Resource Values	Sensitivity		Site Values	Suitable	
	Yes	No		Yes	No
Soil/Slope		<u>X</u>	Terrain diversity	<u>X</u>	
Plants & Wildlife	<u>X</u>		Accessibility	<u>X</u>	
Cultural Resources	<u>X</u>		Traditional Use	<u>X</u>	
Native American	<u>X</u>		Proximity to Users	<u>X</u>	
Wilderness		X	Si e	<u>X</u>	
Scenic Quality		X	Manageable Boundaries		<u>X</u>
Recreation		<u>X</u>			
Range		X			
GE™		<u>X</u>			
			Other Site Values	Sensit	ive
				Yes	No
			Res./Pvt. Owner	<u>X</u>	
			Agricultu		<u>X</u>
			Educ./Research	_	<u>x</u>
			Other Agencies	<u>X</u>	
			Saf tv	<u>X</u>	
			Adjacent Land		

TRADITIONAL USE

The area has been used for motorized vehicle free play for over 20 years. It currently receives approximately 70,000 visitor use days (VUDs) of off-road vehicle-related use annually (56,000 casual, 14,000 competitive).

PROXIMITY TO USERS

The area is convenient to the San Diego urban area (2 hour drive) and the Imperial Valley area ([hour drive).

SIZE

Size is adequate for a wide variety of large or small scale competitive events. The area's size also combines with its terrain diversity to afford outstanding opportunities for long-distance cross-country travel.

MANAGEABLE BOUNDARIES

The area's major shortcoming is the general lack of clearly identifiable boundaries between the open area and adjacent limited or withdrawn areas. Under all management alternatives considered, extensive use of signs would have to be made in order to adequately identify these boundaries to the public. In most cases, boundaries would be located on flat open ground without identifiable features such as roads or powerlines. Some boundaries pass through badland "mudhill" terrain. In many areas boundaries make frequent right—angle turns along the edges of legal subdivisions. At least 600 "open," "closed" and limited" boundary signs would be required to implement the Proposed Action alternative.

OTHER SENSITIVE VALUES

PRIVATE LANDS

The open area would contain 7,220 of private lands under Alternative C, approximately 5,000 acres under the Proposed Action (Alternative A), and approximately 1,200 Ac under Alternative D. No residences or other developments are present on the private parcels. All parcels east of the U.S. Gypsum railroad are frequently traversed by off-road vehicles. Primary access routes cross a number of parcels, and the only available access corridor between Plaster City and Superstition Mountain (aside from the indirect San Felipe Corridor route) crosses private property between Target 103 and the Parachute Drop Zone. Acquisition of private parcels is recommended to eliminate conflicts with landowners.

OTHER AGENCIES

The Bureau of Reclamation and U.S. Navy are interested parties. Until such time as Reclamation relinquishes its withdrawal, it must concur in all management actions in the area. U.S. Navy operational requirements are deliniated in the proposed BIM/U.S. Navy Cooperative Agreement.

SAFETY

The major safety hazards relate to U.S. Navy operations. These will be mitigated through withdrawal to the Navy of RSZ A and appropriate signing of the withdrawal boundaries by the Navy. Some potential hazards to off-road recreationists also exist from Navy operations in RSZ B and RSZ C, although they are much less severe. Potential hazards in each zone are deliniated in the proposed Cooperative Agreement.

MANAGEMENT DECISION RATIONALE

PROPOSED DECISION

The area proposed for open area in Alternative A (proposed action) is recommended for motorized vehicle free play (Map 4). Appropriate mitigations will protect sensitive resources (as described in Chapter IV).

RATIONALE

In making the decision to establish a portion of the area for motorized vehicle free play, consideration has been given to the high-quality opportunities for off-road recreation which have made the Superstition Mountain area the second most popular vheicular recreation area in Western Imperial County. Consideration was also given to sentitive resources and other sensitive factors such as private lands, Navy operations, and safety. Recommended mitigating measures for the Proposed Action are listed in the "Mitigation" section of this report. Final selected mitigating measures will be indicated in the Record of Decision for the 1985 Desert Plan Amendments.

ANALYSIS OF EXPECTED IMPACTS ON AREA FROM MOTOR VEHICLE USE

Expected impacts are discussed in Chapter IV of this report, Environmental Consequences, in the section on Amendment One - West Side.

Affected Environment

Definition: 3-1

Information Sources: 3-2

Amendments (1984)

Criteria: 1-1

Cumulative Impacts: 4-61

Description: 2-2

Maps, individuals: Appendix A

Map, regional: 1-2

Reason for Submission: 2-2 to 2-13

Rejected: Appendix C

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Gold Basin/Rand Intaglio (No. 67): 2-9, 4-47, A-8

Lake Cahuilla (No. 66): 3-27, 3-28, 4-23, 4-24

Plank Road (No. 72): 2-10, 4-48, A-9

Yuha Basin ACEC (No. 64): 2-9, 4-46, A-7

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BLM/Navy Cooperative Agreement

Alternatives: 2-15

Details of Agreement: Appendix E

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Maps: Volume II

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Ammobroma sonorae (sandfood): 3-34, 4-25

Astragulus crotalariae (salton Milkvetch): 3-19, 4-7, 4-8, 4-21

Astragalus lentiginosus var. borreganus (Borrego milkvetch): 3-34

Astragalus lentiginosus var. Coachellae (Coachella Valley Milkvetch): 3-41

Astragalus magdalenae var peirsonii (Peirson's milkvetch,) 3-18, 3-34, 4-25

Croton wigginsii (Wiggins croton): 3-34, 4-25

Cryptantha costata (ribbed cryptantha): 3-34

Dalea emoryi: 3-19

Helianthus niveus ssp. tephrodes (desert sunflower): 3-34, 4-25

Linanthus maculatus (Little San Bernardino Mountain Linanthus): 3-41

Lyrocaarpa coulteri var. palmeri (Coulter's Lyrepod): 3-34

Opuntia wigginsii (Wiggins cholla): 3-19

Palafoxia arida var. gigantea (giant spanish Needle): 3-34, 4-25

Pilostyles thurberii (Thurber's pilostyles): 3-19, 4-6, 4-7, 4-8,

4-18,4-21, 4-64, 4-68

Sphaeralcea rusbyi var. eremicola (Rusby's desert mallow): 4-46

California Native Plant Society (CNPS) List of sensitive species: H-1, H-2, H-3

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Coachalla Canal: 2-21, 3-35, 3-36, 4-25, 4-26, 4-30

Coachella Valley Fringe-Toed Lizard: 2-7, 3-29, 3-40, 4-39 to 4-41

Communicative Sites: See Multiple Use Class Guidelines

Cultural Resources and Native American Values

BLM's Legal Responsibilities: 4-12, Appendix G Motorized Vehicle Effects: C-2, 4-2, 4-3

East Mojave National Scenic Area: 2-6, 2-10, 4-34 to 4-39, 4-50 to 4-52, 4-68, A-1, A-11

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Lava Beds HMA: 4-35

Morongo HMA: 2-12, 4-57, A-14

Coyote Canyon HMA: 2-12, 4-58, A-14

Imperial Sand Dunes Recreation Area: 2-21, 3-35, 3-36, 4-7, 4-24, 4-25, 4-28, 4-29

Kumeyaay Indians: 3-6, 3-10, 4-3

Lake Cahuilla: 2-21, 3-5, 3-6, 3-7, 3-8, 3-9, 3-27, 4-23

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